

Service Manual

Cassette Deck

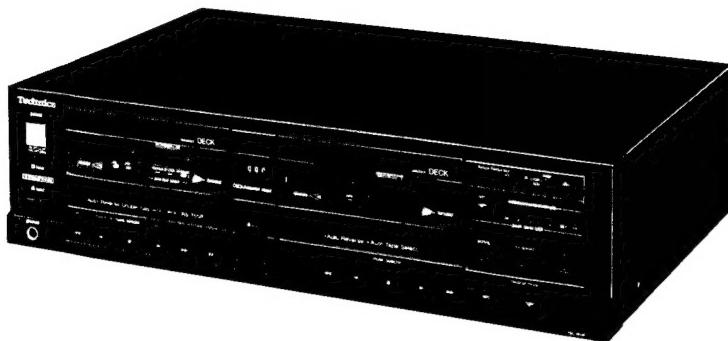
**dbx® /Dolby B-C NR, Auto-Reverse
Double Cassette Deck**



Color

(K)...Black Type
(S)...Silver Type

RS-T55R



Color	Areas
(K)	[M].....U.S.A.
(K) (S)	[MC].....Canada.
(K) (S)	[E].....All European areas except United Kingdom.
(K) (S)	[EK].....United Kingdom.
(K) (S)	[EG].....F.R. Germany.
(K) (S)	[EH].....Holland.
(K) (S)	[XA].....Asia, Latin America, Middle Near East and Africa.
(K) (S)	[XL].....Australia.
(K) (S)	[XB].....Saudi Arabia.
(K)	[PA].....Far East PX.
(K)	[PE].....European Military.

SPECIFICATIONS

Deck system	Stereo cassette deck
Track system	4-track, 2-channel
Heads	
(DECK A) REC/PLAY	Solid Permaloy head
Erasing	Double-gap ferrite head
(DECK B) PLAY	Solid Permaloy head
Motors	
(DECK A) Capstan/reel table drive	2 speed electronically controlled DC motor
(DECK B) Capstan/reel table drive	2 speed electronically controlled DC motor
Recording system	
Bias frequency	AC bias
Erasing system	77 kHz
Tape speed	AC erase
Frequency response (w/o N.R.)	4.8 cm/sec. (1-7/8 ips)
METAL	20 Hz~18 kHz
CrO ₂	30 Hz~17 kHz (DIN)
NORMAL	20 Hz~17 kHz
Dynamic Range (with dbx on)	30 Hz~16 kHz (DIN)
Max. Input level improvement (with dbx on)	30 Hz~16 kHz
S/N	30 Hz~15 kHz (DIN)
dbx on	110 dB (1 kHz)
Dolby C NR on	10 dB
Dolby B NR on	92 dB (A weighted)
NR off	74 dB (CCIR)
	66 dB (CCIR)
	56 dB (A weighted)

Wow and flutter 0.07% (WRMS) [others]
0.1% (WRMS) [XL, XA, XB]
±0.2% (DIN)

Fast Forward and Rewind Time Approx. 95 seconds with C-60 cassette tape

Input sensitivity and impedance
LINE 60 mV/47 kΩ
Output voltage and impedance
LINE 400 mV/3 kΩ
HEADPHONES 80 mV

■ GENERAL

Power consumption 21W
Power supply
For U.S.A. and Canada AC 60 Hz, 120V
For United Kingdom and Australia AC 50 Hz/60 Hz, 240V
For continental Europe AC 50 Hz/60 Hz, 220V
For others AC 50 Hz/60 Hz, 110V/127V/220V/240V
Dimensions (W×H×D) 430 × 118.6 × 273.5 mm
(16-15/16" × 4-11/16" × 10-25/32")

Weight 5.2 kg (11.5 lb.)

Note:

Specifications are subject to change without notice.

Weight and dimensions are approximate.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

** The term dbx is a registered trademark of dbx Inc.

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Technics

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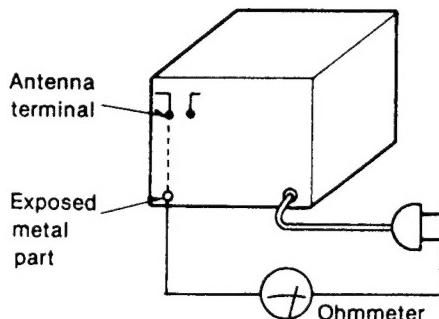
■ SAFETY PRECAUTION (This "safety precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

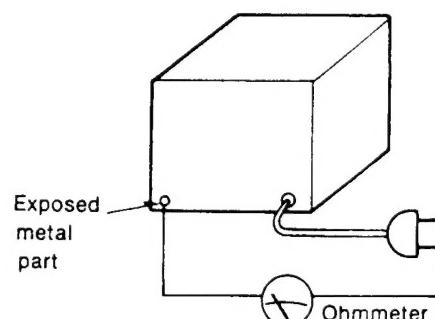
• INSULATION RESISTANCE TEST

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between $3M\Omega$ and $5.2M\Omega$ to all exposed parts. (Fig. A) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. B)

Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.



(Fig. A)



(Fig. B)

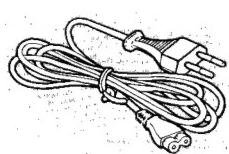
Resistance = $3M\Omega$ — $5.2M\Omega$

Resistance = Approx. ∞

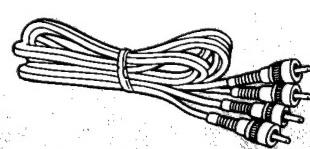
4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer..

■ ACCESSORIES

• AC power supply cord	1
SFDAC05G02 [EK]	
SFDAC05E03 [E, EH, EG]	
SJA183 [XB]	
SJA172 [MC]	
SJA173 [XL]	
SJA172-1 [M]	
SJA168-1 [XA]	

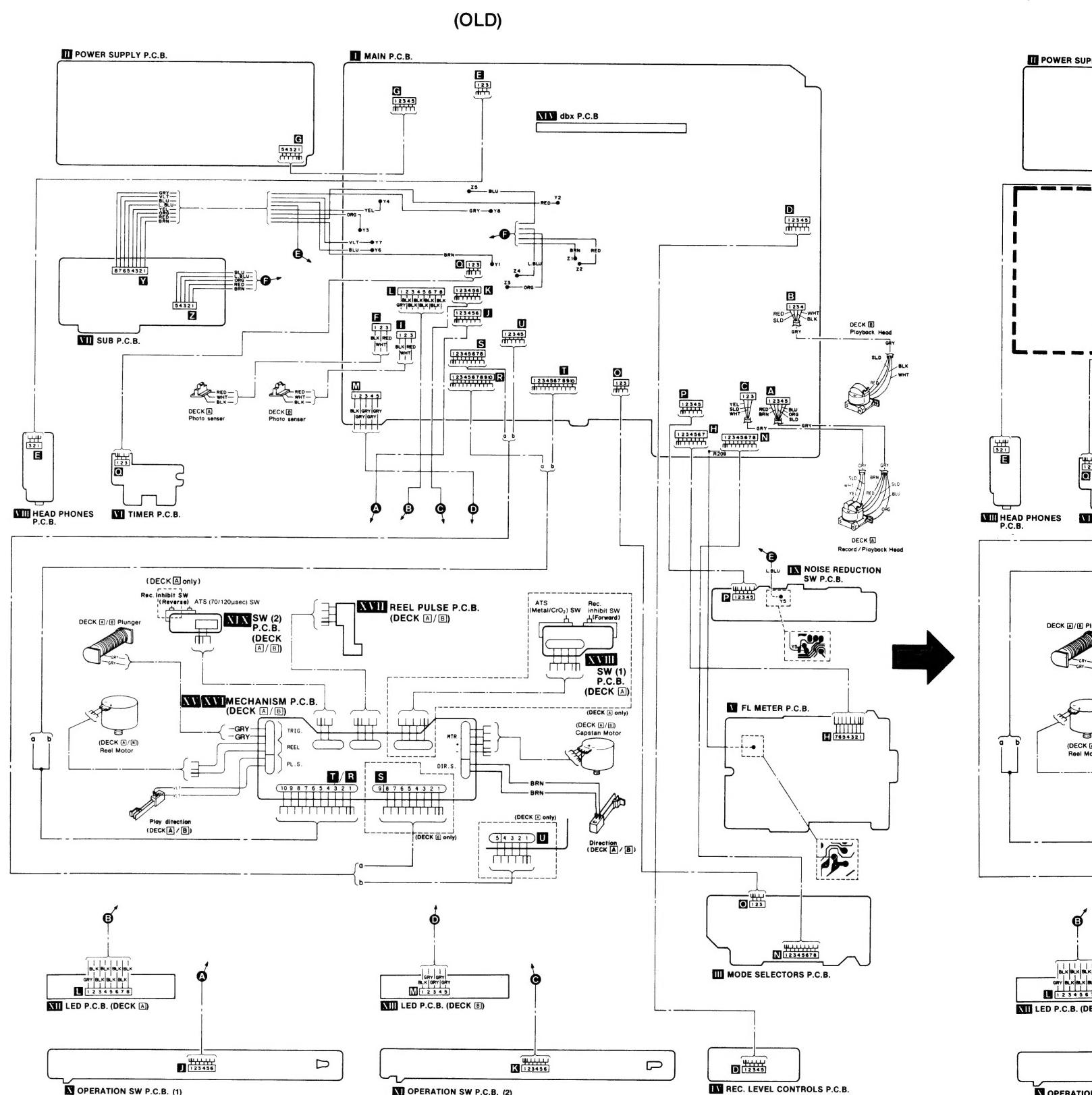


• Stereo connection cables	2
(SJP2264)	



Change of Ref. No.		Parts No.	Part Name & Description	Remarks
OLD	NEW			
RESISTORS				
R610	R610 [M, MC, E, EG] [EH, XA, XB, PA, PE]	ERDS1FJ470	Carbon, 47Ω, 1/2W	Correction
R611	R611 [M, MC, E, EG] [EH, XA, XB, PA, PE]	ERDS1FJ470	Carbon, 47Ω, 1/2W	Correction
R615	R615 [M, MC, E, EG] [EH, XA, XB, PA, PE]	ERDS1FJ2R2	Carbon, 2.2Ω, 1/2W	Correction
R616	R616 [M, MC, E, EG] [EH, XA, XB, PA, PE]	ERDS1FJ4R7	Carbon, 4.7Ω, 1/2W	Correction
CAPACITORS				
C81, C82	C81, C82 [EG]	ECBT1H102KB5	Ceramic, 1000pF, 50V	Correction
C83	C83 [EG]	ECKD1H223PF	Ceramic, 0.022μF, 50V	Correction
INTEGRATED CIRCUIT				
IC401	IC901	LC6554H-3426	INTEGRATED CIRCUIT	Correction
TRANSISTOR				
Q407	Q907	2SC3311A-Q	TRANSISTOR	Correction
I.C. PROTECTORS				
ICP603	ICP603 [EK, XL]	SRUN10	I.C. PROTECTOR	Correction
ICP601, ICP602	ICP601, ICP602 [EK, XL]	SRUN15	I.C. PROTECTOR	Correction
TRANSFORMER				
T601 [XA, XB, PA]	T601 [XA, XB, PA, PE]	SLT5V21	POWER TRANSFORMER	Correction
SWITCH				
S602 [XA, XB, PA]	S602 [XA, XB, PA, PE]	SSR187-1	SW, VOLTAGE SELECT	Correction

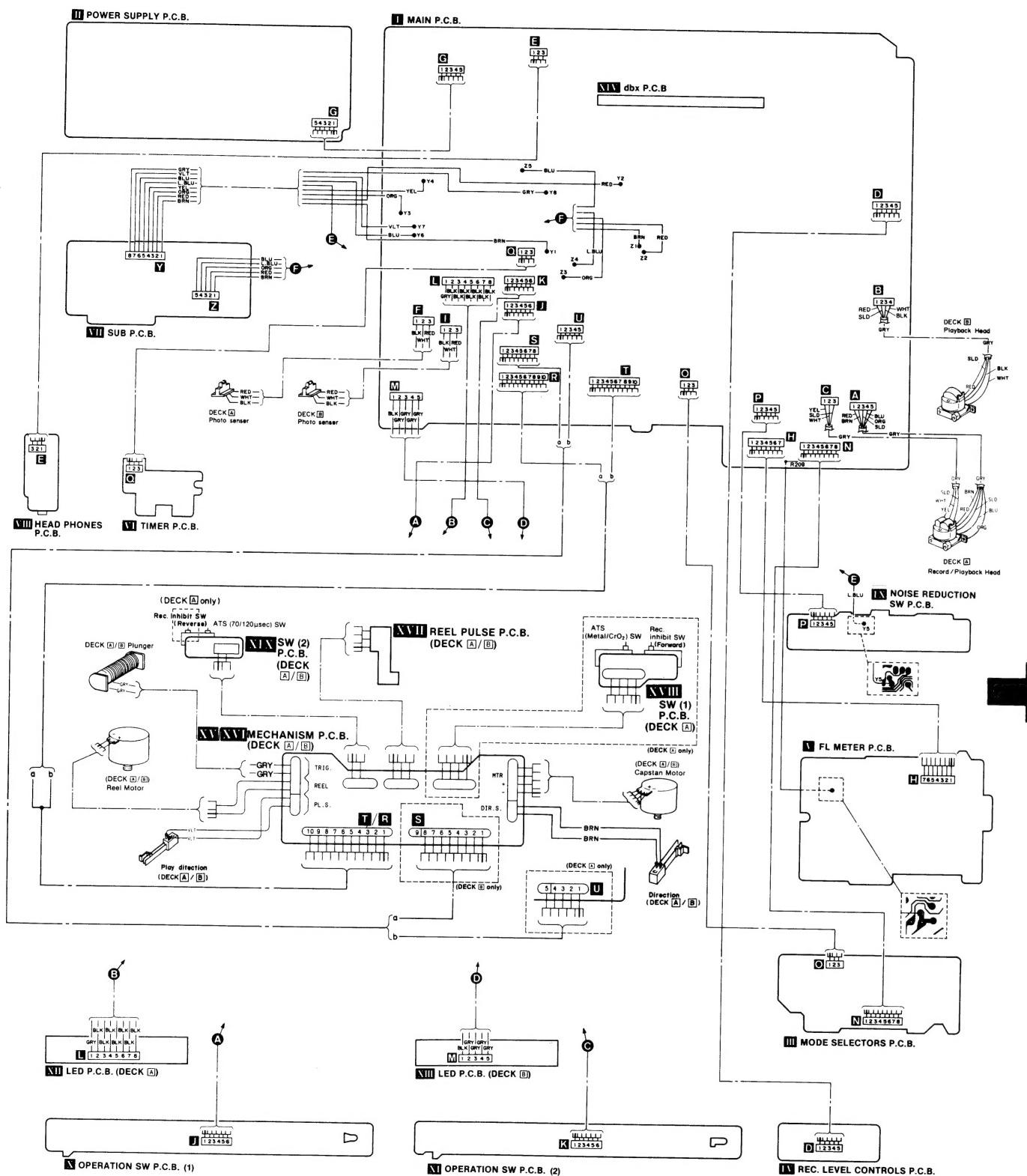
■ WIRING CONNECTION DIAGRAM



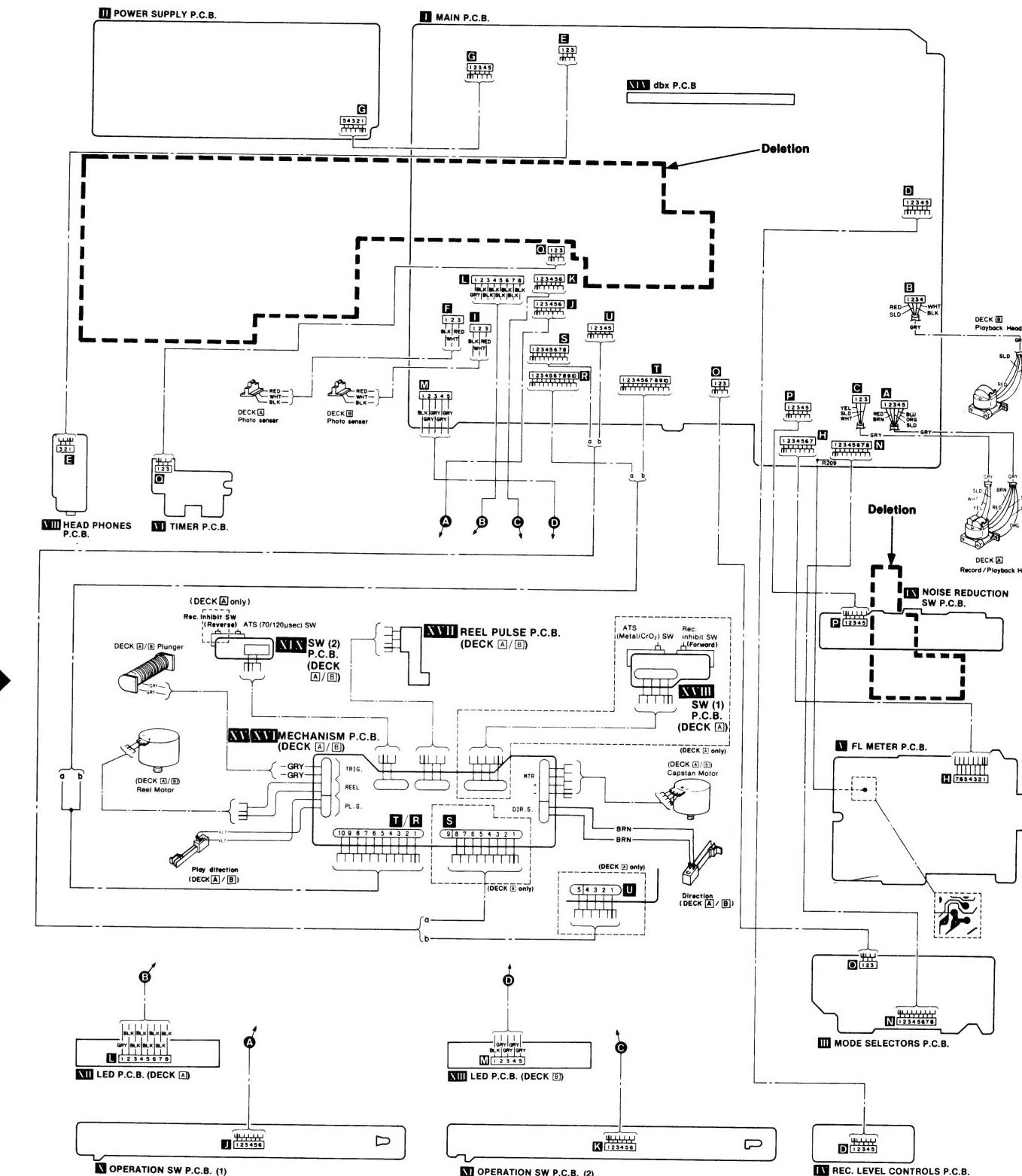
■ WIRING CONNECTION DIAGRAM

ANSWER

(OLD)



(NEW)



SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with the development of new technology.)

* This schematic diagram applies to units having serial number suffixes "C" or later.

Notes:

- S601 : Power switch in "on" position.
- S602 : Voltage selector in "240V" position ([XA, XB, PA, PE] areas).
- S701 : DECK A Rew./F.F. switch in "off" position.
- S702 : DECK B Rew./F.F. switch in "off" position.
- S703 : DECK A F.F./Rew. switch in "off" position.
- S704 : DECK B F.F./Rew. switch in "off" position.
- S705 : DECK A Play (REV) switch in "off" position.
- S706 : DECK B Play (REV) switch in "off" position.
- S707 : DECK A Play (FWD) switch in "off" position.
- S708 : DECK B Play (FWD) switch in "off" position.
- S709 : DECK A Stop switch in "off" position.
- S710 : DECK B Stop switch in "off" position.
- S711 : DECK A Pause switch in "off" position.
- S712 : Syncro-recording-start switch in "off" position.
- S713 : DECK A Auto rec. mute switch in "off" position.
- S715 : DECK A Rec. switch in "off" position.
- S721 : NR off switch in "off" position.
- S722 : NR dbx switch in "off" position.
- S723 : Dolby C NR switch in "off" position.
- S724 : Dolby B NR switch in "off" position.
- S731 : Editing-tape-speed selector in "off (X1)" position.
- S732 : Edit-recording switch in "off" position.
- S741 : Repeat (↔) switch in "off" position.
- S742 : Reverse (↔) switch in "off" position.
- S743 : One way (↔) switch in "off" position.
- S744 : Series (○) switch in "off" position.
- S750 : Timer stand-by switch in "off" position.
- S901 : DECK A ATS (Metal/CrO₂) switch in "off" position.
- S902 : DECK A ATS (70/120μs) switch in "off" position.
- S903 : DECK A Rec. inhibit (REV) switch in "off" position.
- S904 : DECK A Rec. inhibit (FWD) switch in "off" position.
- S905 : DECK A Play detection switch in "off" position.
- S906 : DECK A Direction switch in "off" position.
- S907 : DECK B ATS (70/120μs) switch in "off" position.
- S908 : DECK B Play detection switch in "off" position.
- S909 : DECK B Direction switch in "off" position.

Resistance are in ohms (Ω), 1/4 watt unless specified otherwise.

1K=1,000 (Ω), 1M=1,000k (Ω)

* Capacity are in micro-farads (μF) unless specified otherwise.

* All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified.

().....Voltage values at record mode.

For measurement use EVM.

* Important safety notice

Components identified by △ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

* (—□—) indicates B (bias).

* (---) indicates the flow of the playback signal.

* (—→) indicates the flow of the record signal.

*** Caution!**

IC and LSI are sensitive to static electricity.

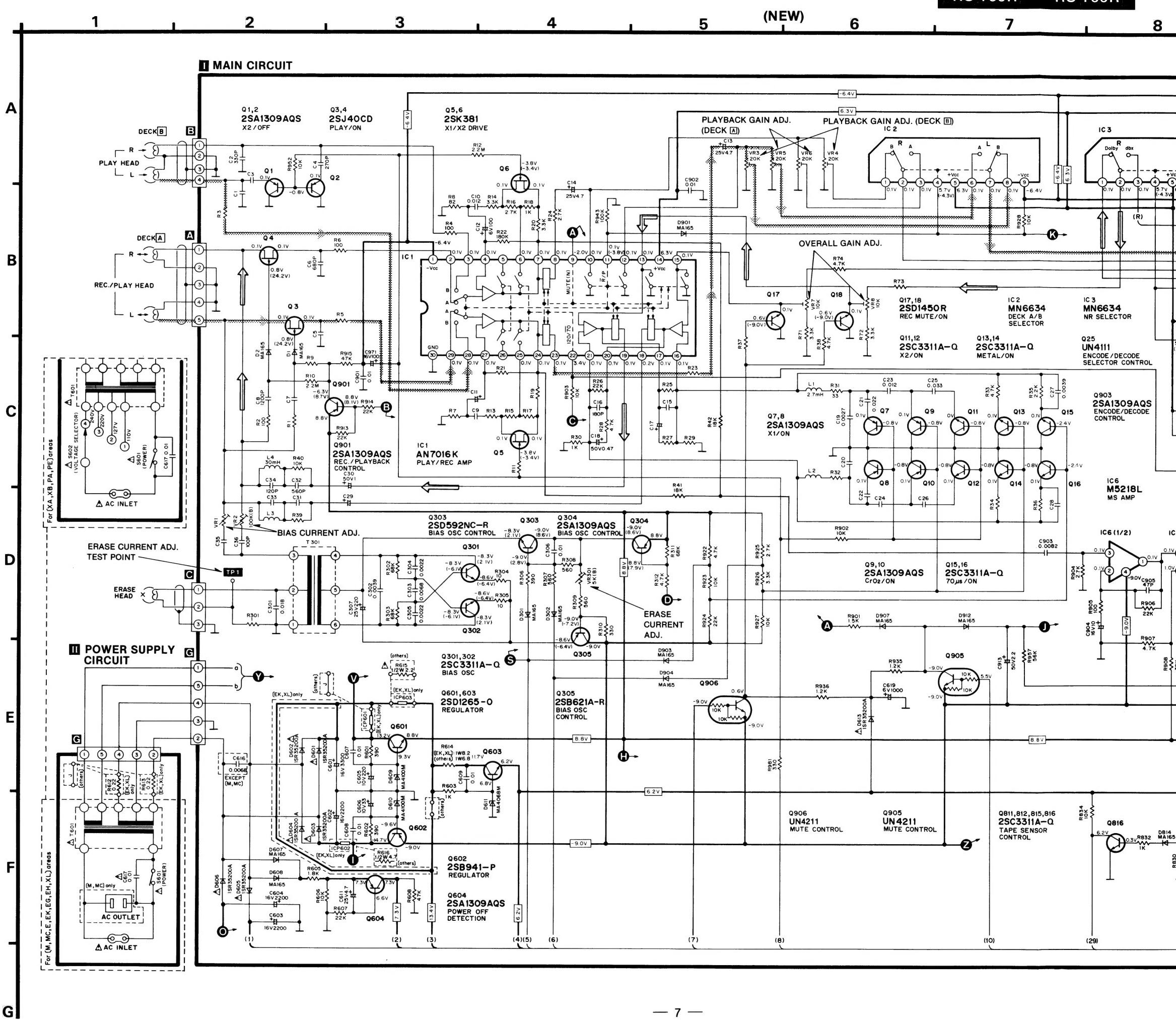
Secondary trouble can be prevented by taking care during repair.

* Cover the parts boxes made of plastics with aluminum foil.

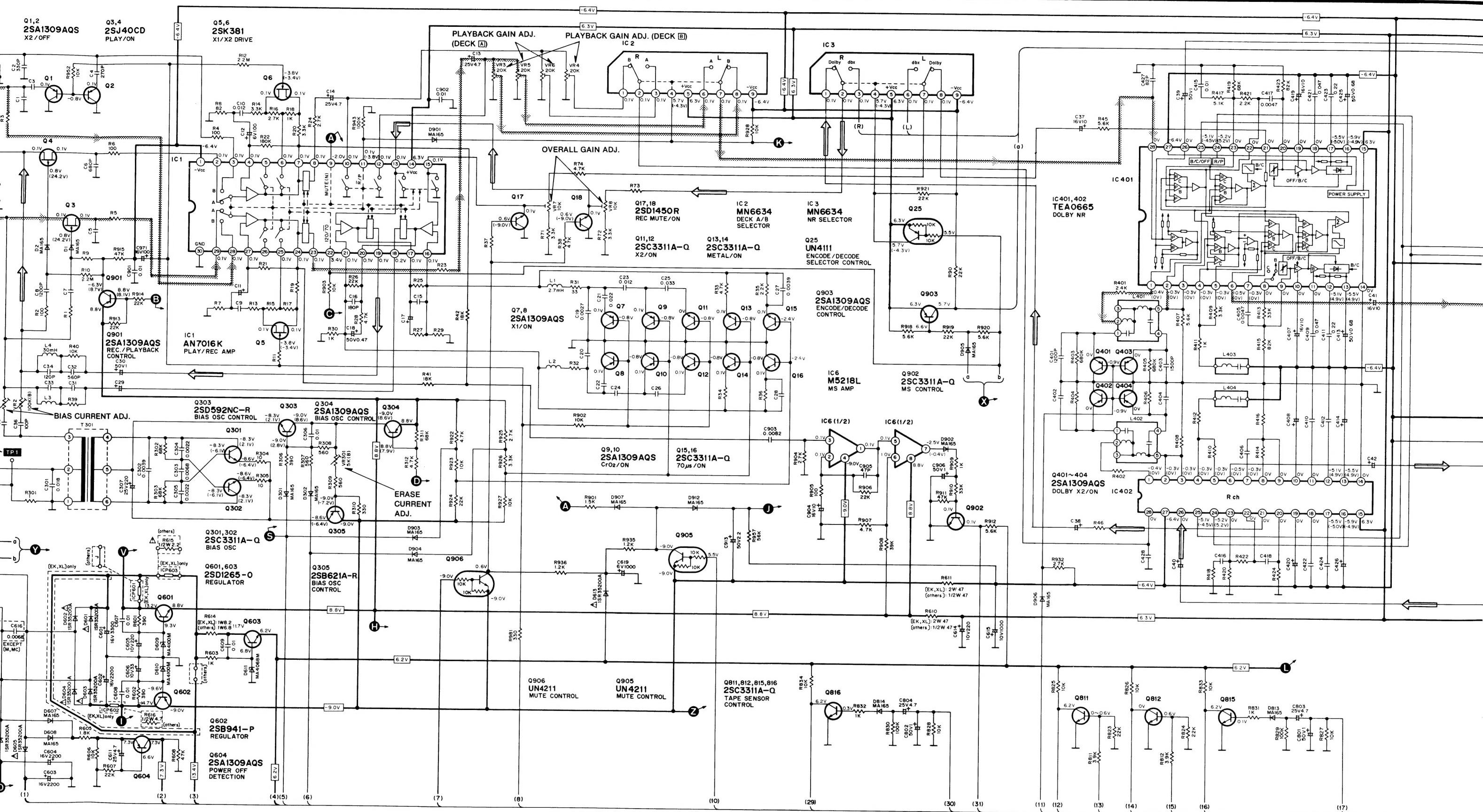
* Ground the soldering iron.

* Put a conductive mat on the work table.

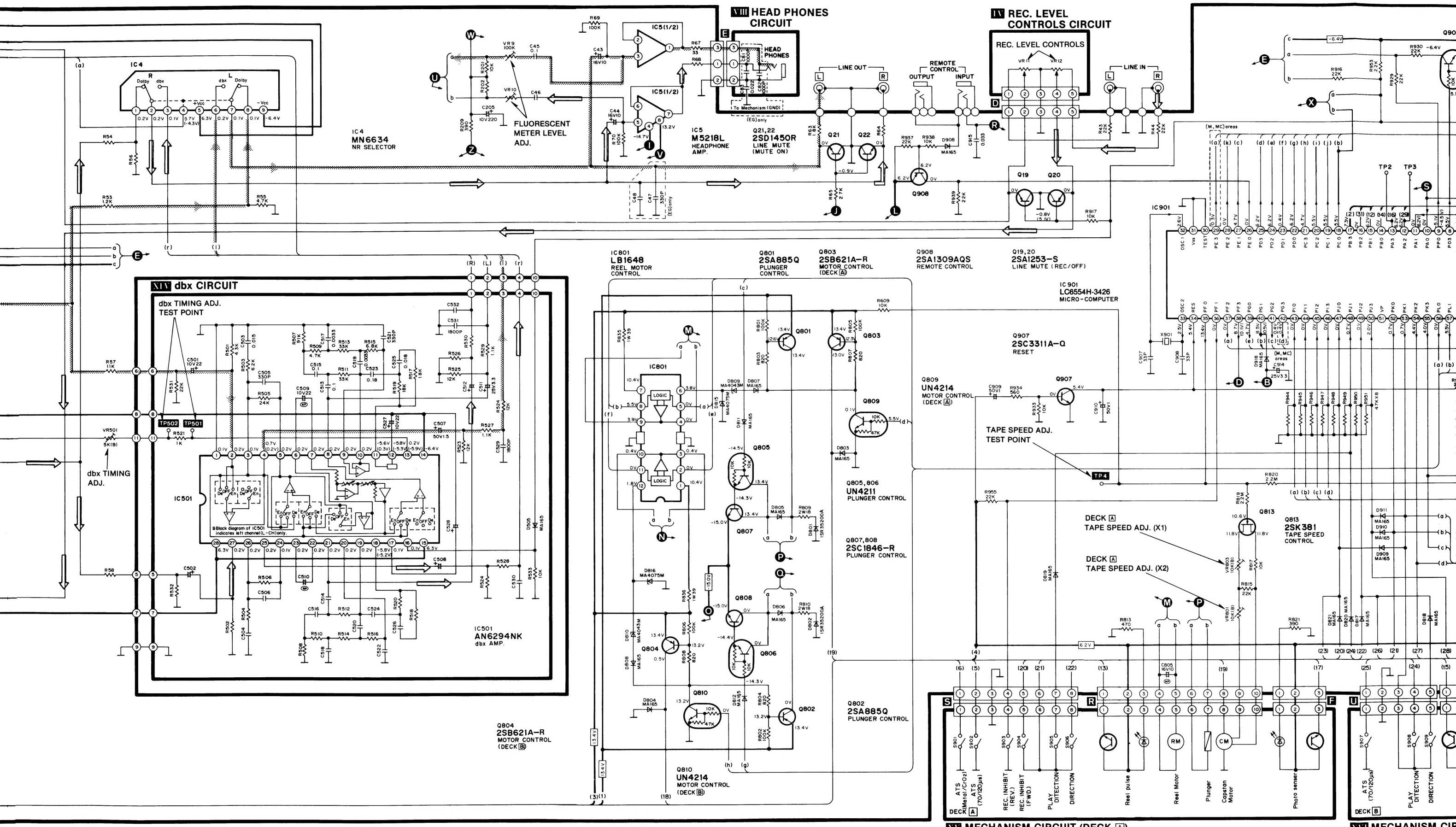
* Do not touch the legs of IC or LSI with the fingers directly.



MAIN CIRCUIT



(NEW)



(NEW)

22

23

24

25

26

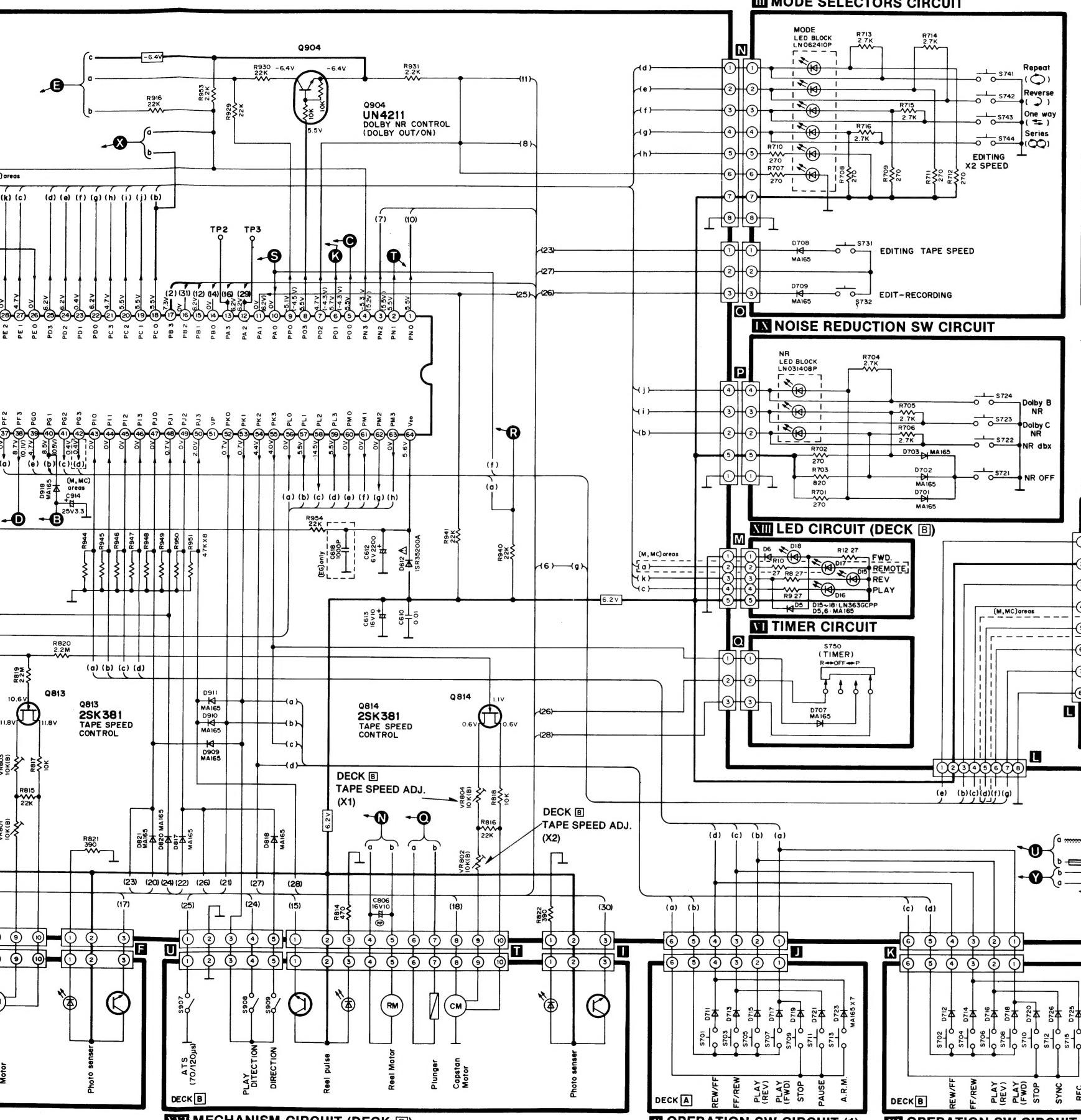
27

28

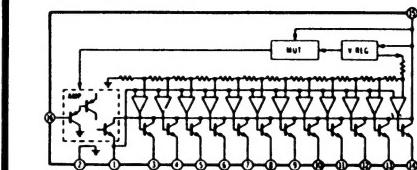
29

30

31

**EQUIVALENT CIRCUIT**

IC201, 202: BA6146

**SPECIFICATIONS**

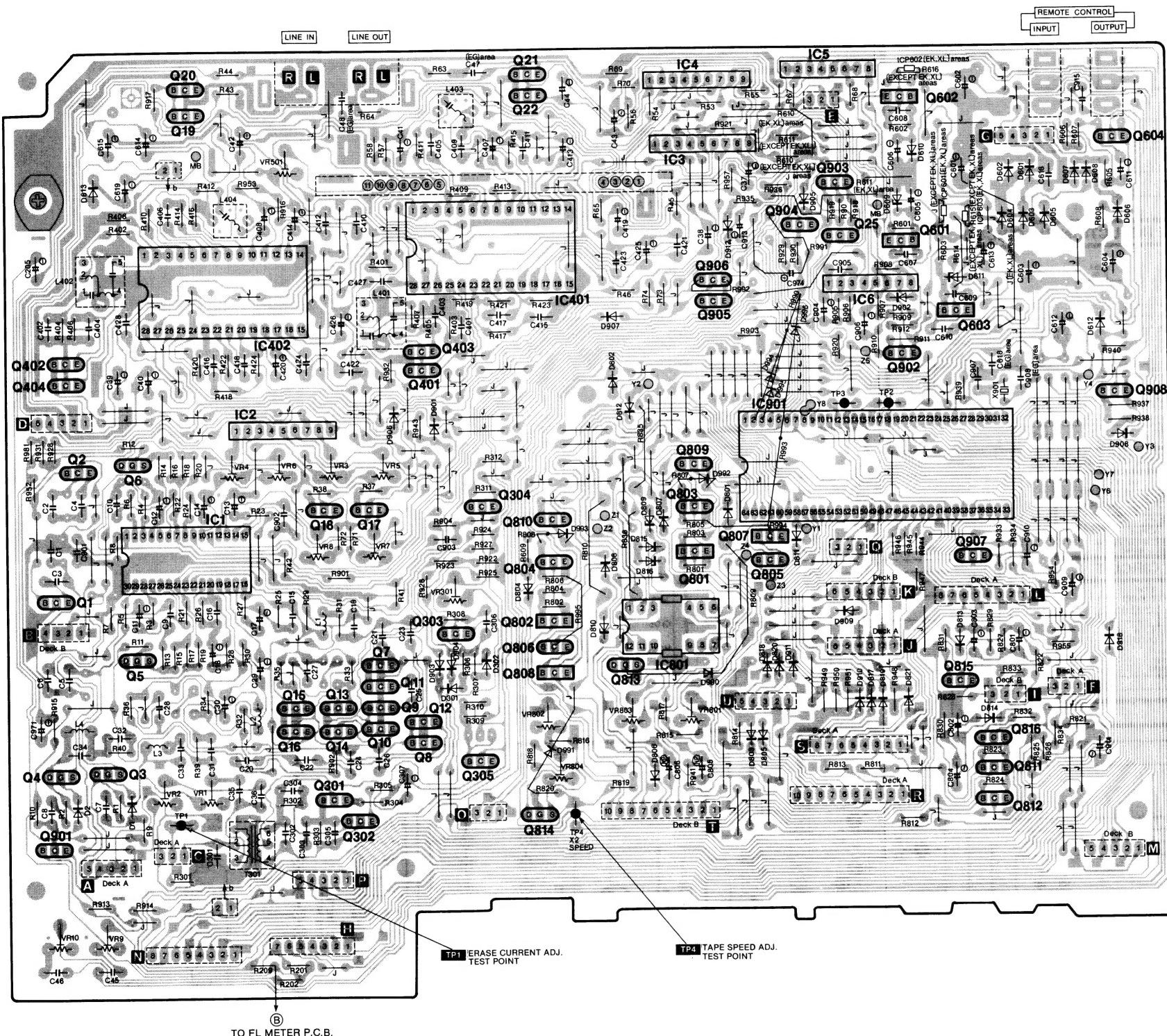
Playback S/N ratio * Test tape...QZZCFM	Greater than 45dB
Overall distortion * Test tape ...QZZCRA for Normal ...QZZCRX for CrO ₂ ...QZZCRZ for Metal	Normal... Less than 3.5% CrO ₂ , Metal... Less than 4%
Overall S/N ratio * Test tape...QZZCRA	Greater than 43dB (without NAB filter)

■ PRINTED CIRCUIT BOARDS

(OLD) 14 15 16 17 18 19 20

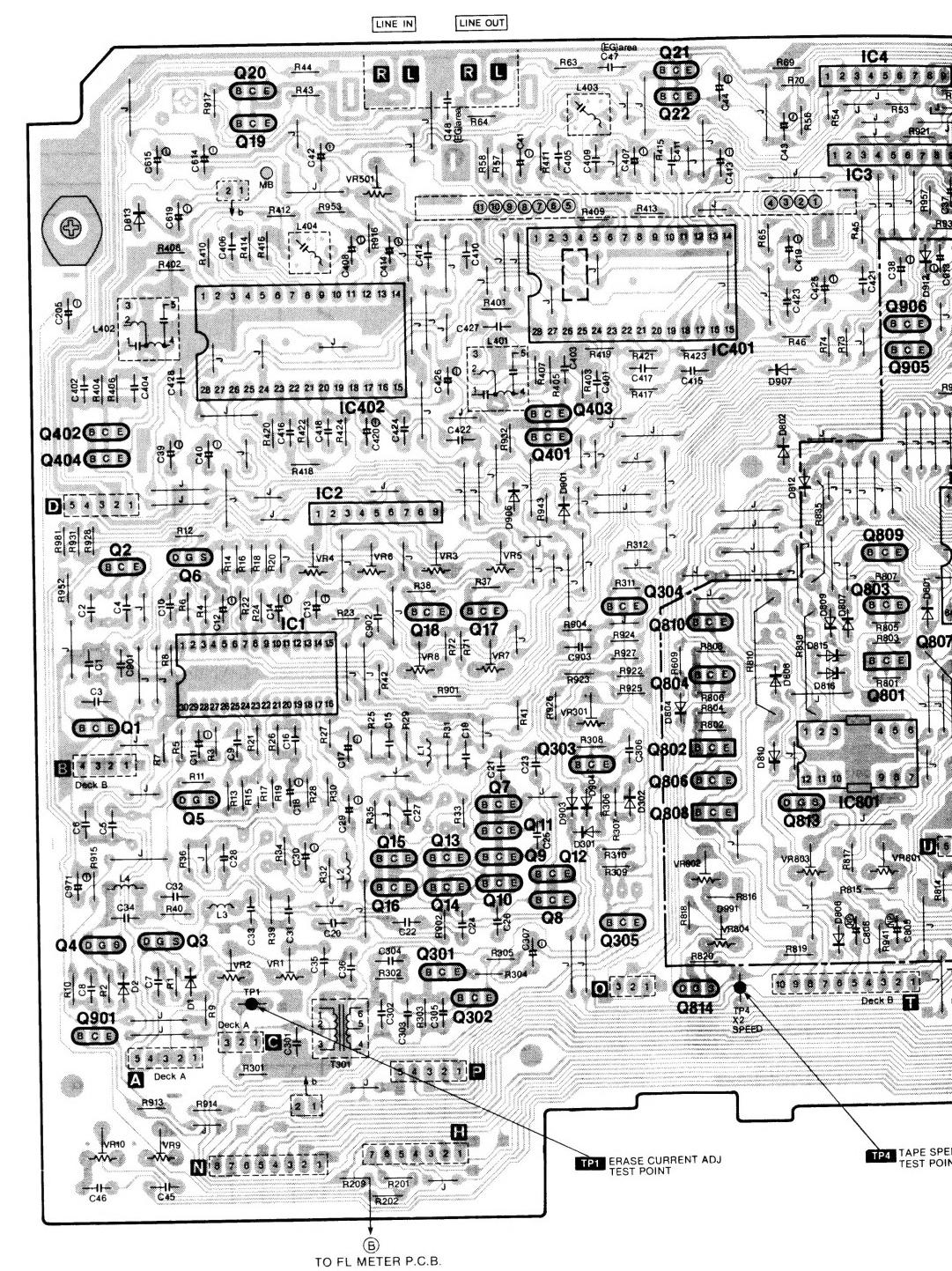
(NEW) 14 15 16 17

I MAIN P.C.B.



I MAIN P.C.B.

: Changed parts

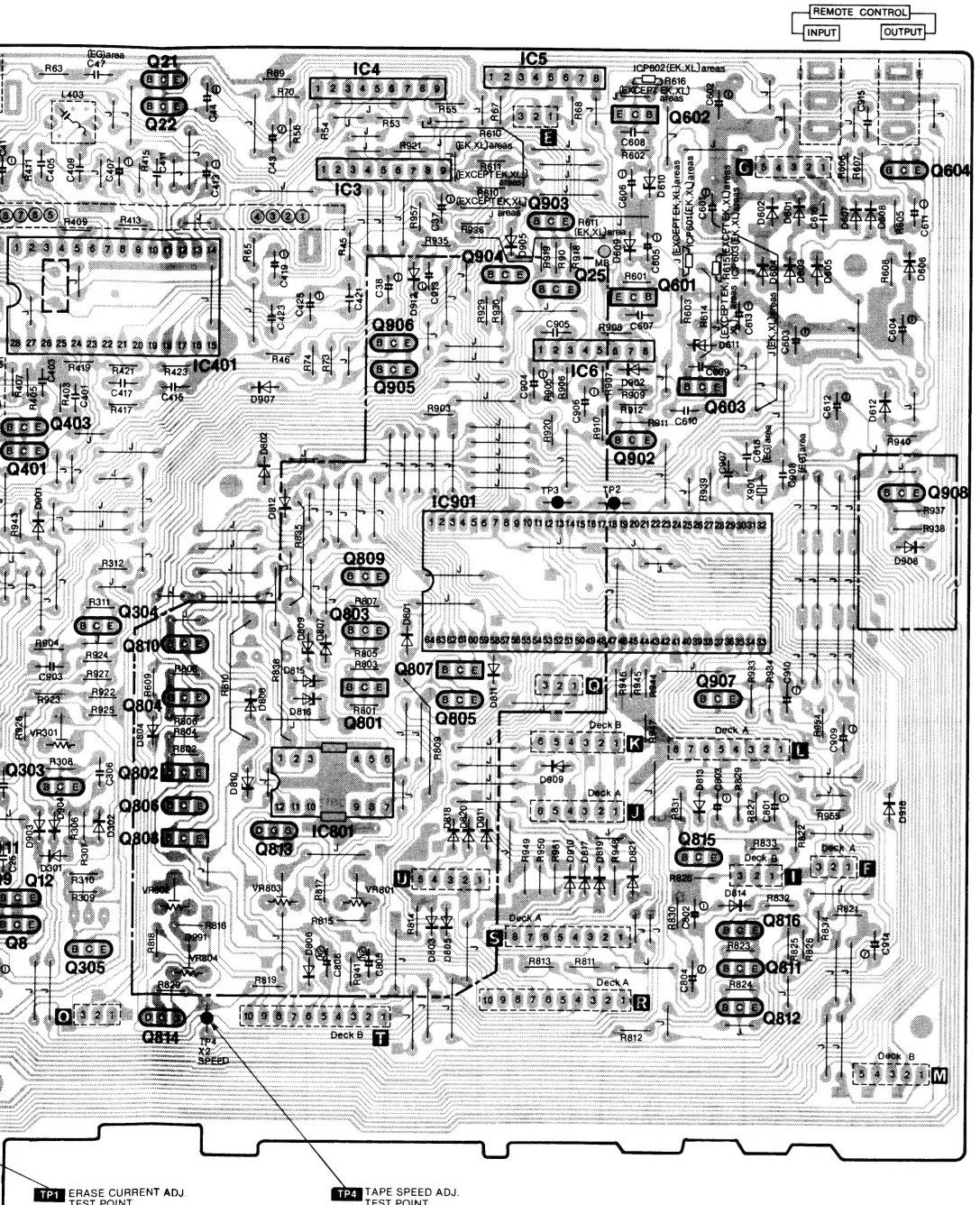


* Caution!
The microcomputer for system control of this unit
(Ref No. IC901) has been changed during production.
(OLD) LC6554H-3355 → LC6554H-3426
New type is supplied as the replacement part.

Deletion

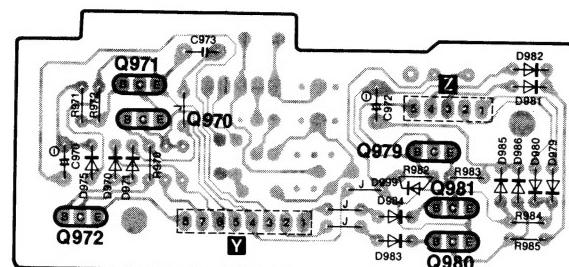
(NEW) 16 17 18 19 20

and parts



(OLD) 7 8

VII SUB P.C.B.



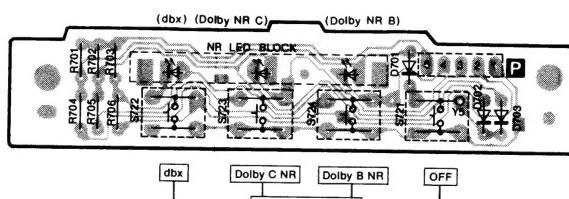
(NEW) 7 8

A
B

Deletion

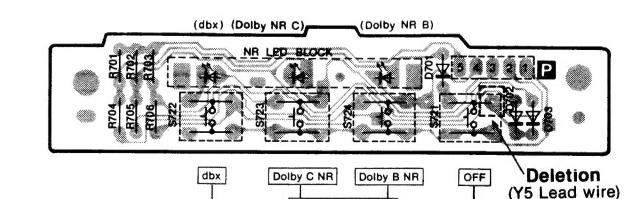
(OLD) 1 2 3

IX NOISE REDUCTION SW P.C.B.



(NEW) 1 2 3

IX NOISE REDUCTION SW P.C.B.



■ RESISTORS & CAPACITORS

Notes: * Important safety notice:

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

* Bracketed indications in Ref. No. columns specify the area.

Parts without these indications can be used for all areas.

Numbering System of Resistor

Example

ERD	25	F	J	102
Type	Wattage	Shape	Tolerance	Value
ERX	2	AN	J	471
Type	Wattage	Shape	Tolerance	Value 47×10^3 (ohm)

Numbering System of Capacitor

Example

ECKD	1H	102	Z	F
Type	Voltage	Value	Tolerance	Peculiarity
ECEA	50	M		330
Type	Voltage	Peculiarity		Value (33×10^{-6} microfarad)

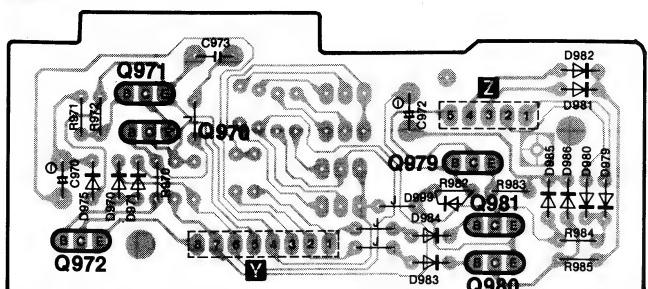
Resistor Type	Wattage	Tolerance
ERD : Carbon	10 : 1/8W	J : $\pm 5\%$
ERG : Metal Oxide	12 : 1/2W	F : $\pm 1\%$
ERX : Metal Film	25 : 1/4W	G : $\pm 2\%$
ERQ : Fuse Type Metal	1A : 1W	K : $\pm 10\%$
ERD [] L : Carbon (chip)	18 : 1/8W	
ERO [] K : Metal Film (chip)	S2 : 1/4W	
ERC : Solid	S1 : 1/2W	
	2F : 1/4W	
	50 : 1/2W	
	2A : 2W	

Capacitor Type	Voltage	Tolerance
ECE : Electrolytic	0J : 6.3V	C : $\pm 0.25\mu F$
ECCD : Ceramic	1A : 10V	J : $\pm 5\%$
ECKD : Ceramic	1C : 16V	K : $\pm 10\%$
ECQM : Polyester	1E : 25V	Z : $\pm 80\%$
	1H : 50V	-20%
ECQP : Polypropylene	1V : 35V	P : $\pm 100\%$
	50 : 50V	-0%
ECG : Ceramic	05 : 50V	M : $\pm 20\%$
ECEADDDN : Non Polar	2H : 500V	
Electrolytic	2A : 100V	D : $\pm 0.5\mu F$
QCU [] : Ceramic (Chip Type)	1 : 100V	G : $\pm 2\%$
ECUX : Ceramic (Chip Type)	KC : 400V AC	
ECF : Semiconductor	KC : 125VAC	
	(UL)	
EECW : Liquid electrolyte	1J : 63V	
double layer capacitor		

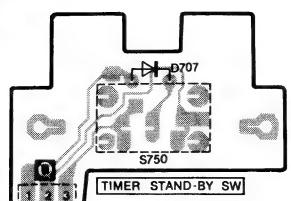
Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code	Ref. No.	Part No.	Part Code	
RESISTORS									
R1, R2	ERDS2TJ101	001 152 2421 0	R304, R305	ERDS2TJ100	001 152 2420 1	R610	ERDS1FJ470	001 152 2632 1	
R3, R4	ERDS2TJ101	001 152 2421 0	R306	ERDS2TJ391	001 152 2360 6	R610	ERG2ANJ470	001 151 0165 0	
R5, R6	ERDS2TJ101	001 152 2421 0	R308, R309	ERDS2TJ471	001 152 2361 5	(EK, XL)			
R7, R8	ERDS2TJ820	001 152 2453 2	R310	ERDS2TJ331	001 152 2356 2	R611	ERDS1FJ470	001 152 2632 1	
R9, R10	ERDS2TJ225	001 152 3149 3	R311	ERDS2TJ683	001 152 2450 5	(EK, XL)			
R11, R12	ERDS2TJ225	001 152 3149 3	R312	ERDS2TJ472	001 152 2362 4	R612, R613	ERQ14LKR22E	001 190 0738 6	
R13, R14	ERDS2TJ332	001 152 2357 1	R401, R402	ERDS2TJ242	001 152 3150 0	(EK, XL)			
R15, R16	ERDS2TJ272	001 152 2354 4	R403, R404	ERDS2TJ684	001 152 2451 4	R614	ERX1ANJ6R8	001 151 0445 5	
R17, R18	ERDS2TJ102	001 152 2346 4	R405, R406	ERDS2TJ684	001 152 2451 4	(IM, MC, E)			
R19, R20	ERDS2TJ332	001 152 2357 1	R407, R408	ERDS2TJ562	001 152 2445 2	(EH, EG, XA)			
R21, R22	ERDS2TJ184	001 152 2588 8	R409, R410	ERDS2TJ332	001 152 2357 1	(XB, PA, PE)			
R23, R24	ERDS2TJ471	001 152 2361 5	R411, R412	ERDS2TJ102	001 152 2346 4	R614	ERX1ANJ8R2	001 151 0447 3	
R25, R26	ERDS2TJ223	001 152 2423 7	R413, R414	ERDS2TJ333	001 152 2358 0	(EK, XL)			
R27, R28	ERDS2TJ472	001 152 2362 4	R415, R416	ERDS2TJ823	001 152 2456 9	R615	Δ	ERDS1FJ2R2	001 152 2755 1
R29, R30	ERDS2TJ102	001 152 2346 4	R417, R418	ERDS2TJ512	001 152 2596 8	R616	ERDS1FJ4R7	001 152 2631 2	
R31, R32	ERDS2TJ330	001 152 2355 3	R419, R420	ERDS2TJ683	001 152 2450 5	R701, R702	ERDS2TJ271	001 152 2435 4	
R33, R34	ERDS2TJ472	001 152 2362 4	R421, R422	ERDS2TJ222	001 152 2353 5	R703	ERDS2TJ821	001 152 2454 1	
R35, R36	ERDS2TJ222	001 152 2353 5	R423, R424	ERDS2TJ823	001 152 2456 9	R704, R705	ERDS2TJ272	001 152 2435 4	
R37, R38	ERDS2TJ472	001 152 2362 4	R501, R502	ERDS2TJ432	001 152 2827 2	R706	ERDS2TJ272	001 152 2435 4	
R39, R40	ERDS2TJ103	001 152 2347 3	R503, R504	ERDS2TJ622	001 152 3156 4	R707, R708	ERDS2TJ271	001 152 2435 4	
R41, R42	ERDS2TJ183	001 152 2429 2	R505, R506	ERDS2TJ243	001 152 2825 4	R709, R710	ERDS2TJ271	001 152 2435 4	
R43, R44	ERDS2TJ223	001 152 2432 7	R507, R508	ERDS2TJ913	001 152 3708 4	R711, R712	ERDS2TJ271	001 152 2435 4	
R45, R46	ERDS2TJ562	001 152 2445 2	R509, R510	ERDS2TJ472	001 152 2362 4	R713, R714	ERDS2TJ272	001 152 2435 4	
R53, R54	ERDS2TJ122	001 152 2423 8	R511, R512	ERDS2TJ333	001 152 2358 0	R715, R716	ERDS2TJ272	001 152 2435 4	
R55, R56	ERDS2TJ472	001 152 2362 4	R513, R514	ERDS2TJ333	001 152 2358 0	R718, R802	ERDS2TJ104	001 152 2438 2	
R57, R58	ERDS2TJ113	001 152 3145 7	R515, R516	ERDS2TJ682	001 152 2365 1	R803, R804	ERDS2TJ821	001 152 2454 1	
R63, R64	ERDS2TJ182	001 152 2352 6	R517, R518	ERDS2TJ182	001 152 2352 6	R805, R806	ERDS2TJ104	001 152 2438 2	
R65	ERDS2TJ272	001 152 2354 4	R519, R520	ERDS2TJ183	001 152 2429 2	R807, R808	ERDS2TJ821	001 152 2454 1	
R67, R68	ERDS2TJ330	001 152 2355 3	R521	ERDS2TJ102	001 152 2346 4	R809, R810	ERX2ANJ180	001 151 0133 8	
R69, R70	ERDS2TJ104	001 152 2348 2	R523, R524	ERDS2TJ123	001 152 2424 7	R811, R812	ERDS2TJ392	001 152 2439 0	
R71, R72	ERDS2TJ332	001 152 2357 1	R525, R526	ERDS2TJ123	001 152 2424 7	R813, R814	ERDS2TJ471	001 152 2361 5	
R73, R74	ERDS2TJ472	001 152 2362 4	R527, R528	ERDS2TJ112	001 152 3889 4	R815, R816	ERDS2TJ223	001 152 2432 7	
R90	ERDS2TJ223	001 152 2432 7	R529, R530	ERDS2TJ111	001 152 3889 4	R817, R818	ERDS2TJ103	001 152 2347 3	
R201, R202	ERDS2TJ103	001 152 2347 3	R531, R532	ERDS2TJ223	001 152 2432 7	R819, R820	ERDS2TJ225	001 152 3149 3	
R203, R204	ERDS2TJ103	001 152 2347 3	R533	ERDS2TJ103	001 152 2347 3	R821, R822	ERDS2TJ391	001 152 2360 6	
R205	ERDS2TJ103	001 152 2347 3	R601, R602	ERDS2TJ391	001 152 2360 6	R823, R824			

Ref. No.	Part No.	Part Code	Description	Ref. No.	Part No.	Part Code	Description
Q17, Q18	2SD1450R	001 030 4366 1	TRANSISTOR	I.C.PROTECTORS			
Q19, Q20	2SA1253-S	001 030 4843 3	TRANSISTOR	ICP603	SRUN10	001 061 3071 4	IC PROTECTOR
Q21, Q22	2SD1450R	001 030 4366 1	TRANSISTOR	ICP601, ICP602	SRUN15	001 061 2834 9	I.C.PROTECTOR
Q25	UN4111	001 030 2899 5	TRANSISTOR	VARIABLE RESISTORS			
Q26	UN4211	001 030 4033 9	TRANSISTOR	VR1, VR2	EVND4AA00B15	001 180 2243 2	V.R., 100KΩ(B)
Q27	2SA1309AQS	001 030 4846 0	TRANSISTOR	VR3, VR4	EVND4AA00B24	001 180 2244 1	V.R., 20KΩ(B)
Q28, Q29	2SC3311A-Q	001 030 5279 5	TRANSISTOR	VR5, VR6	EVND4AA00B24	001 180 2244 1	V.R., 20KΩ(B)
Q30	2SD592NC-R	001 030 1759 0	TRANSISTOR	VR7, VR8	EVND4AA00B14	001 180 2242 3	V.R., 10KΩ(B)
Q31	2SA1309AQS	001 030 4846 0	TRANSISTOR	VR9, VR10	EVND4AA00B15	001 180 2243 2	V.R., 100KΩ(B)
Q32	2SB621A-R	001 030 0668 6	TRANSISTOR	VR11, VR12	SVR120A54	001 174 9177 3	VARIABLE RESISTOR
Q40, Q41	2SA1309AQS	001 030 4846 0	TRANSISTOR	VR301, VR501	EVND4AA00B53	001 180 2319 9	V.R., 5KΩ(B)
Q42, Q43	2SA1309AQS	001 030 4846 0	TRANSISTOR	VR801, VR802	EVM4LCA00B14	001 180 3116 4	V.R., 10KΩ(B)
Q44	2SC3311A-Q	001 030 5279 5	TRANSISTOR	VR803, VR804	EVND4AA00B14	001 180 2242 3	V.R., 10KΩ(B)
Q601	2SD1265-0	001 030 2652 6	TRANSISTOR	COILS AND TRANSFORMERS			
Q602	2SB841-P	001 030 2696 4	TRANSISTOR	L1, L2	SLQX272-1YT	001 211 0649 2	CHOKE COIL
Q603	2SD1265-0	001 030 2652 6	TRANSISTOR	L3, L4	SLQX303-1K	001 211 1756 6	CHOKE COIL
Q604	2SA1309AQS	001 030 4846 0	TRANSISTOR	L401, L402	QLB40048	001 210 7275 9	COIL
Q801, Q802	2SA885Q	001 030 0457 5	TRANSISTOR	L403, L404	SLM188-K	001 211 2731 1	MPX COIL
Q803, Q804	2SB621A-R	001 030 0668 6	TRANSISTOR	T301	SL08C19-K	001 211 2472 1	OSCILLATOR COIL
Q805, Q806	UN4211	001 030 4033 9	TRANSISTOR	T601	SLT5V18	001 202 9209 7	POWER TRANSFORMER
Q807, Q808	2SC1846-R	001 030 1134 7	TRANSISTOR	(M, MC)	SLT5V19	001 202 9210 4	POWER TRANSFORMER
Q809, Q810	UN4214	001 030 4835 3	TRANSISTOR	(E, EH, EG)	SLT5V20	001 202 9183 0	POWER TRANSFORMER
Q811, Q812	2SC3311A-Q	001 030 5279 5	TRANSISTOR	(EK, XL)	SLT5V21	001 202 9113 4	POWER TRANSFORMER
Q813, Q814	2SK381	001 030 4439 1	TRANSISTOR	(XA, XB, PA)			
Q815, Q816	2SC3311A-Q	001 030 5279 5	TRANSISTOR	OSCILLATORS			
Q901	2SA1309AQS	001 030 4846 0	TRANSISTOR	X901	SVFCSA300MG	001 241 1296 5	CERAMIC FILTER
Q902	2SC3311A-Q	001 030 5279 5	TRANSISTOR	SWITCHES			
Q903	2SC3311A-Q	001 030 5279 5	TRANSISTOR	S601	ESB8249V	003 435 5877 0	POWER SWITCH
Q904, Q905	UN4211	001 030 4033 9	TRANSISTOR	S602	SSR187-1	003 430 2201 5	SW, VOLTAGE SELECT
Q906	UN4211	001 030 4033 9	TRANSISTOR	DIODES			
Q908	2SA1309AQS	001 030 4846 0	TRANSISTOR	D1, D2	MA165	001 032 0494 0	DIODE
Q970, Q971	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D201	MA4030M	001 032 5807 3	DIODE
Q972	UN4111	001 030 2899 5	TRANSISTOR	D202	MA4043M	001 032 5574 1	DIODE
Q979	2SC3311A-Q	001 030 5279 5	TRANSISTOR	D301, D302	MA165	001 032 0494 0	DIODE
Q980, Q981	UN4211	001 030 4033 9	TRANSISTOR	D505	MA165	001 032 0494 0	DIODE
D1, D2	MA165	001 032 0494 0	DIODE	D601, D602	SVD1SR35200A	001 032 3951 4	RECTIFIER
D201	MA4030M	001 032 5807 3	DIODE	D603, D604	SVD1SR35200A	001 032 3951 4	RECTIFIER
D202	MA4043M	001 032 5574 1	DIODE	D605, D606	SVD1SR35200A	001 032 3951 4	RECTIFIER
D301, D302	MA165	001 032 0494 0	DIODE	D607, D608	MA165	001 032 0494 0	DIODE
D505	MA165	001 032 0494 0	DIODE	D609, D610	MA4100M	001 032 4722 1	DIODE
D601, D602	MA165	001 032 3951 4	RECTIFIER	D611	MA4068M	001 032 4954 7	DIODE
D603, D604	MA165	001 032 3951 4	RECTIFIER	D612, D613	SVD1SR35200A	001 032 3951 4	RECTIFIER
D605, D606	MA165	001 032 3951 4	RECTIFIER	D701, D702	MA165	001 032 0494 0	DIODE
D607, D608	MA165	001 032 3951 4	RECTIFIER	D703, D707	MA165	001 032 0494 0	DIODE
D701, D702	MA165	001 032 0494 0	DIODE	D708, D709	MA165	001 032 0494 0	DIODE
D703, D707	MA165	001 032 0494 0	DIODE	D711, D712	MA165	001 032 0494 0	DIODE
D708, D709	MA165	001 032 0494 0	DIODE	D713, D714	MA165	001 032 0494 0	DIODE
D711, D712	MA165	001 032 0494 0	DIODE	D715, D716	MA165	001 032 0494 0	DIODE
D713, D714	MA165	001 032 0494 0	DIODE	D717, D718	MA165	001 032 0494 0	DIODE
D715, D716	MA165	001 032 0494 0	DIODE	D719, D720	MA165	001 032 0494 0	DIODE
D717, D718	MA165	001 032 0494 0	DIODE	D721, D723	MA165	001 032 0494 0	DIODE
D719, D720	MA165	001 032 0494 0	DIODE	D725, D726	MA165	001 032 0494 0	DIODE
D721, D723	MA165	001 032 0494 0	DIODE	D801, D802	SVD1SR35200A	001 032 3951 4	RECTIFIER
D725, D726	MA165	001 032 0494 0	DIODE	D803, D804	MA165	001 032 0494 0	DIODE
D801, D802	MA165	001 032 3951 4	RECTIFIER	D805, D806	MA165	001 032 0494 0	DIODE
D803	MA165	001 032 0494 0	DIODE	D807, D808	MA165	001 032 0494 0	DIODE
D804	MA165	001 032 0494 0	DIODE	D809, D810	MA4043M	001 032 5574 1	DIODE
D805, D806	MA165	001 032 0494 0	DIODE	D811, D812	MA165	001 032 0494 0	DIODE
D807, D808	MA165	001 032 0494 0	DIODE	D813, D814	MA165	001 032 0494 0	DIODE
D809, D810	MA4043M	001 032 5574 1	DIODE	D815, D816	MA4075M	001 032 7212 6	DIODE
D811, D812	MA165	001 032 0494 0	DIODE	D817, D818	MA165	001 032 0494 0	DIODE
D813, D814	MA165	001 032 0494 0	DIODE	D819, D820	MA165	001 032 0494 0	DIODE
D815, D816	MA4075M	001 032 7212 6	DIODE	D821, D901	MA165	001 032 0494 0	DIODE
D817, D818	MA165	001 032 0494 0	DIODE	D902, D903	MA165	001 032 0494 0	DIODE
D819, D820	MA165	001 032 0494 0	DIODE	D904, D905	MA165	001 032 0494 0	DIODE
D821, D901	MA165	001 032 0494 0	DIODE	D906, D907	MA165	001 032 0494 0	DIODE
D902, D903	MA165	001 032 0494 0	DIODE	D908, D909	MA165	001 032 0494 0	DIODE
D904, D905	MA165	001 032 0494 0	DIODE	D910, D911	MA165	001 032 0494 0	DIODE
D906, D907	MA165	001 032 0494 0	DIODE	D912, D918	MA165	001 032 0494 0	DIODE
D908, D909	MA165	001 032 0494 0	DIODE	D970, D971	MA165	001 032 0494 0	DIODE
D910, D911	MA165	001 032 0494 0	DIODE	D975, D979	MA165	001 032 0494 0	DIODE
D912, D918	MA165	001 032 0494 0	DIODE	D980, D981	MA165	001 032 0494 0	DIODE
D970, D971	MA165	001 032 0494 0	DIODE	D982, D983	MA165	001 032 0494 0	DIODE
D975, D979	MA165	001 032 0494 0	DIODE	D984, D985	MA165	001 032 0494 0	DIODE
D980, D981	MA165	001 032 0494 0	DIODE	D986, D990	MA165	001 032 0494 0	

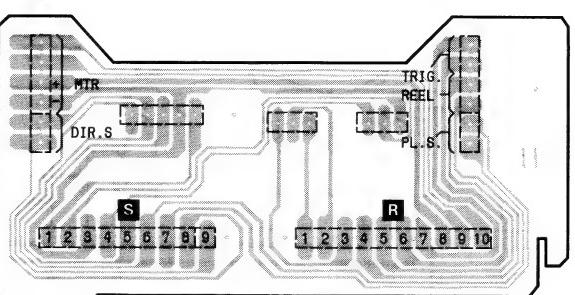
VII SUB P.C.B.



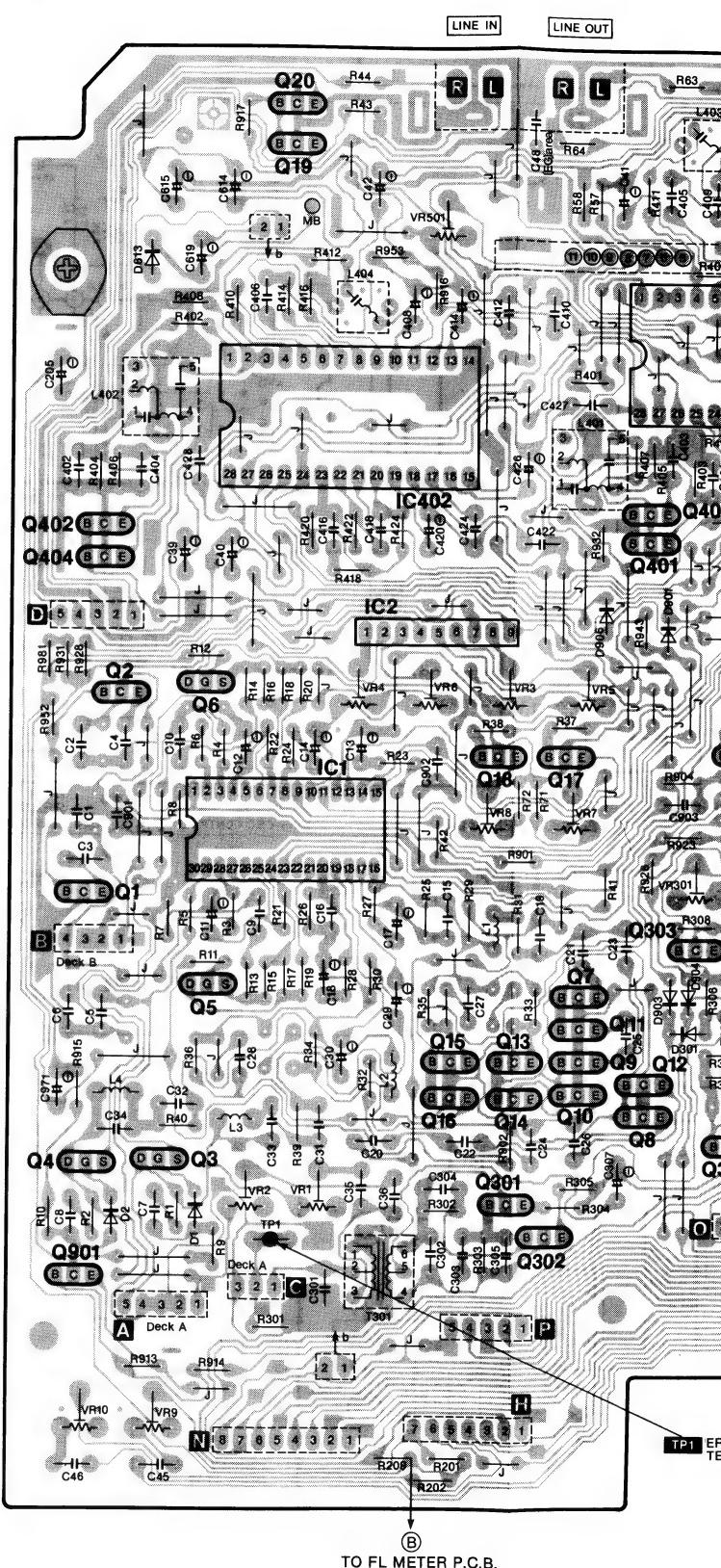
VI TIMER P.C.B.



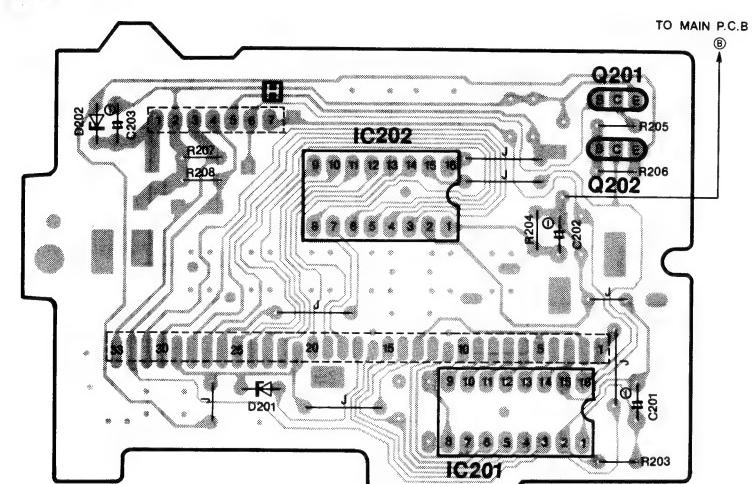
XV MECHANISM P.C.B. (DECK A)



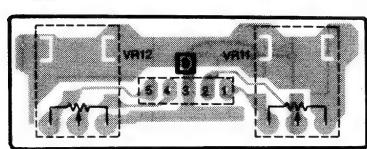
MAIN P.C.B.



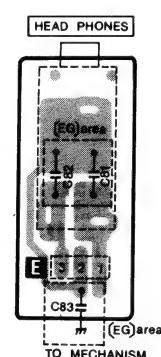
V FL METER P.C.B.



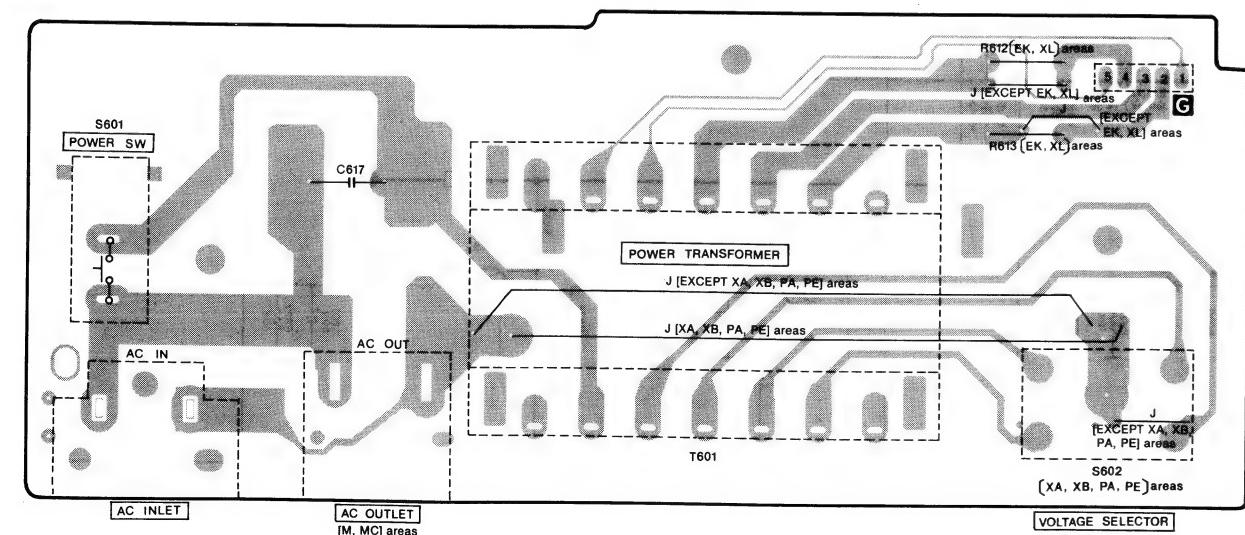
IV REC. LEVEL CONTROLS P.C.B.



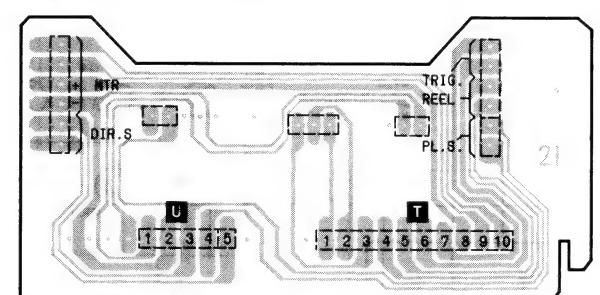
VII HEAD PHONES P.C.B.



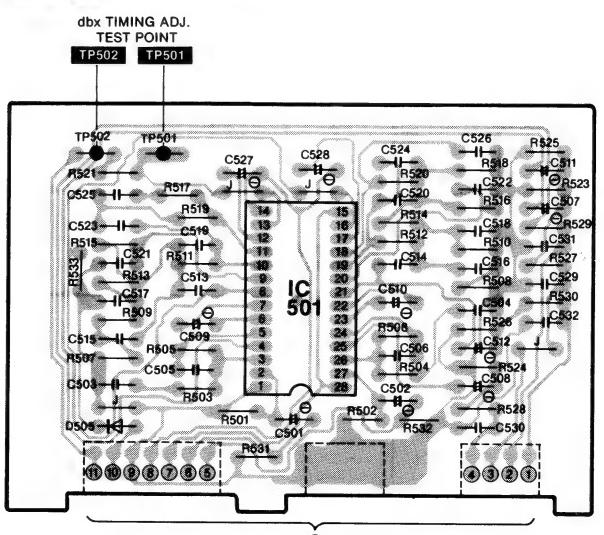
II POWER SUPPLY P.C.B.



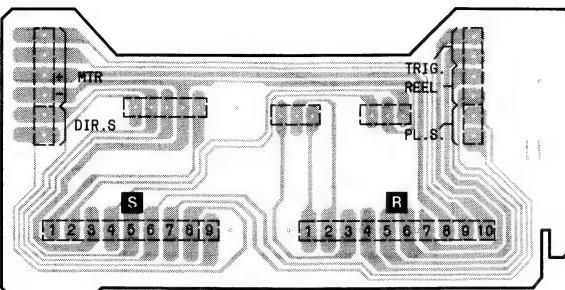
XVI MECHANISM P.C.B. (DECK B)



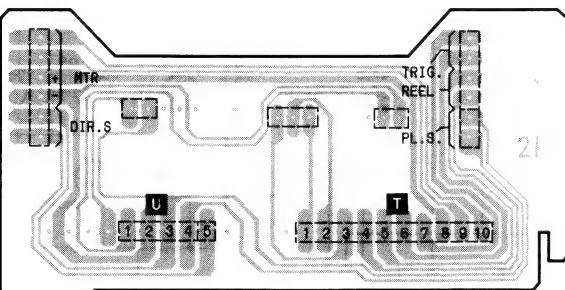
XIV dbx P.C.B.



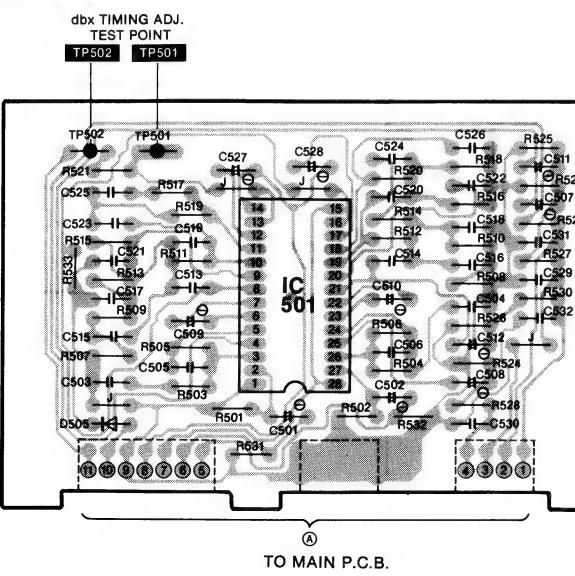
XV MECHANISM P.C.B. (DECK A)



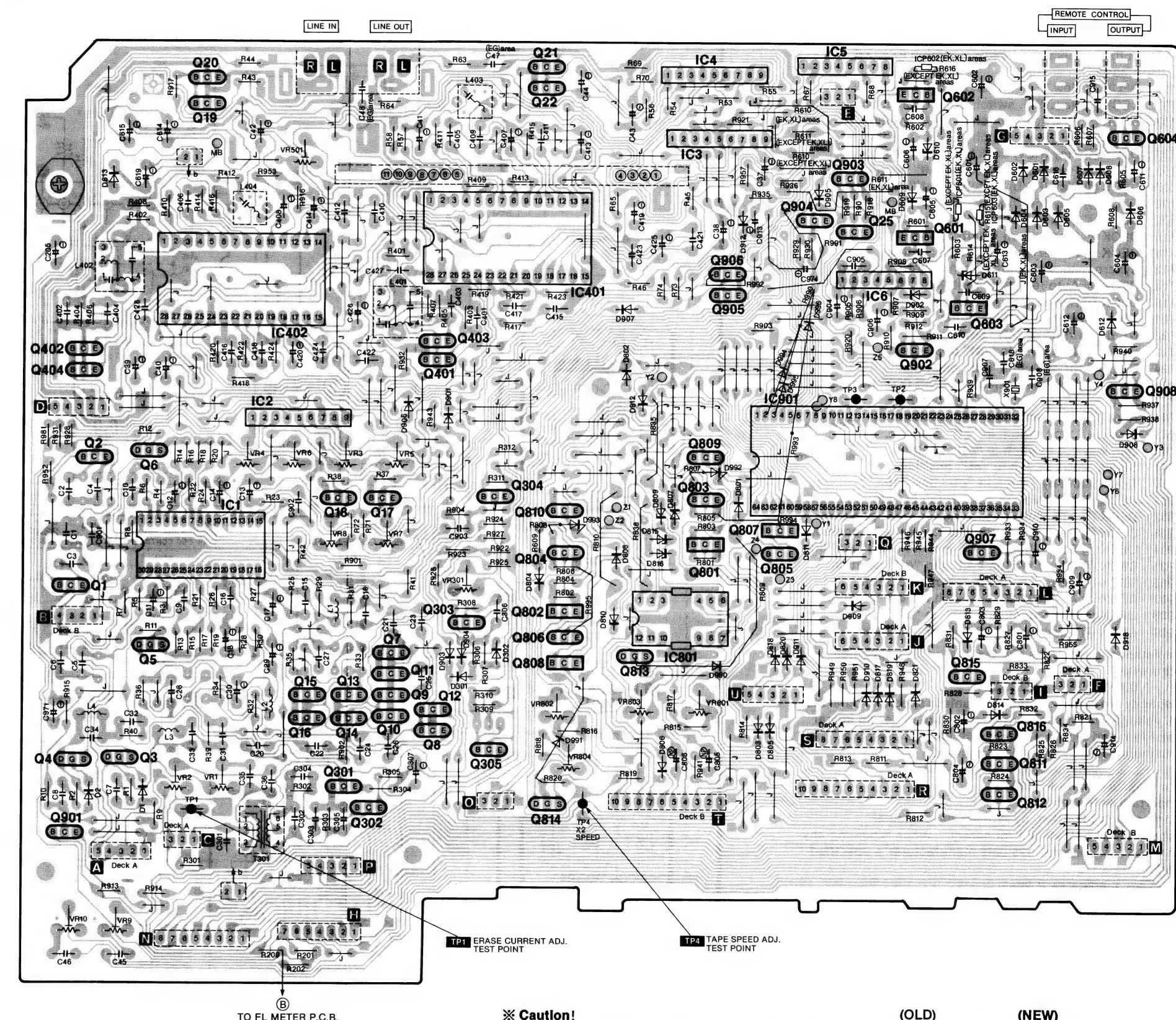
XVI MECHANISM P.C.B. (DECK B)



XIV dbx P.C.B.



I MAIN P.C.B.



※ Caution!
The microcomputer for system control of this unit
(Ref No. IC901) has been changed during production.

(OLD) (NEW)
LC6554H-3355 → LC6554H-3426
New type is supplied as the replacement part.

■ SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with the development of new technology.)

Notes:

- S601 : Power switch in "on" position.
 - S602 : Voltage selector in "240V" position ([XA, XB, PA, PE] areas).
 - S701 : DECK A Rew./F.F. switch in "off" position.
 - S702 : DECK B Rew./F.F. switch in "off" position.
 - S703 : DECK A F.F./Rew. switch in "off" position.
 - S704 : DECK B F.F./Rew. switch in "off" position.
 - S705 : DECK A Play (REV) switch in "off" position.
 - S706 : DECK B Play (REV) switch in "off" position.
 - S707 : DECK A Play (FWD) switch in "off" position.
 - S708 : DECK B Play (FWD) switch in "off" position.
 - S709 : DECK A Stop switch in "off" position.
 - S710 : DECK B Stop switch in "off" position.
 - S711 : DECK A Pause switch in "off" position.
 - S712 : Syncro-recording-start switch in "off" position.
 - S713 : DECK A Auto rec. mute switch in "off" position.
 - S715 : DECK A Rec. switch in "off" position.
 - S721 : NR off switch in "off" position.
 - S722 : NR dbx switch in "off" position.
 - S723 : Dolby C NR switch in "off" position.
 - S724 : Dolby B NR switch in "off" position.
 - S731 : Editing-tape-speed selector in "off (X1)" position.
 - S732 : Edit-recording switch in "off" position.
 - S741 : Repeat (→) switch in "off" position.
 - S742 : Reverse (←) switch in "off" position.
 - S743 : One way (↔) switch in "off" position.
 - S744 : Series (○) switch in "off" position.
 - S750 : Timer stand-by switch in "off" position.
 - S901 : DECK A ATS (Metal/CrO₂) switch in "off" position.
 - S902 : DECK A ATS (70/120μs) switch in "off" position.
 - S903 : DECK A Rec. inhibit (REV) switch in "off" position.
 - S904 : DECK A Rec. inhibit (FWD) switch in "off" position.
 - S905 : DECK A Play detection switch in "off" position.
 - S906 : DECK A Direction switch in "off" position.
 - S907 : DECK B ATS (70/120μs) switch in "off" position.
 - S908 : DECK B Play detection switch in "off" position.
 - S909 : DECK B Direction switch in "off" position.

} Reverse mode selectors

Resistance are in ohms (Ω), 1/

- Capacity are in micro-farads (μF) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at 1K=1,000 (Ω), 1M=1,000k (Ω)

().....Voltage values at record m

For measurement use EVM.

- **Important safety notice**
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

- () indicates B (bias).

- () indicates B (bias).
- () indicates the flow

- (→) indicates the flow of the record signal.

***Caution!**

*Caution!

IC and LSI are sensitive to static

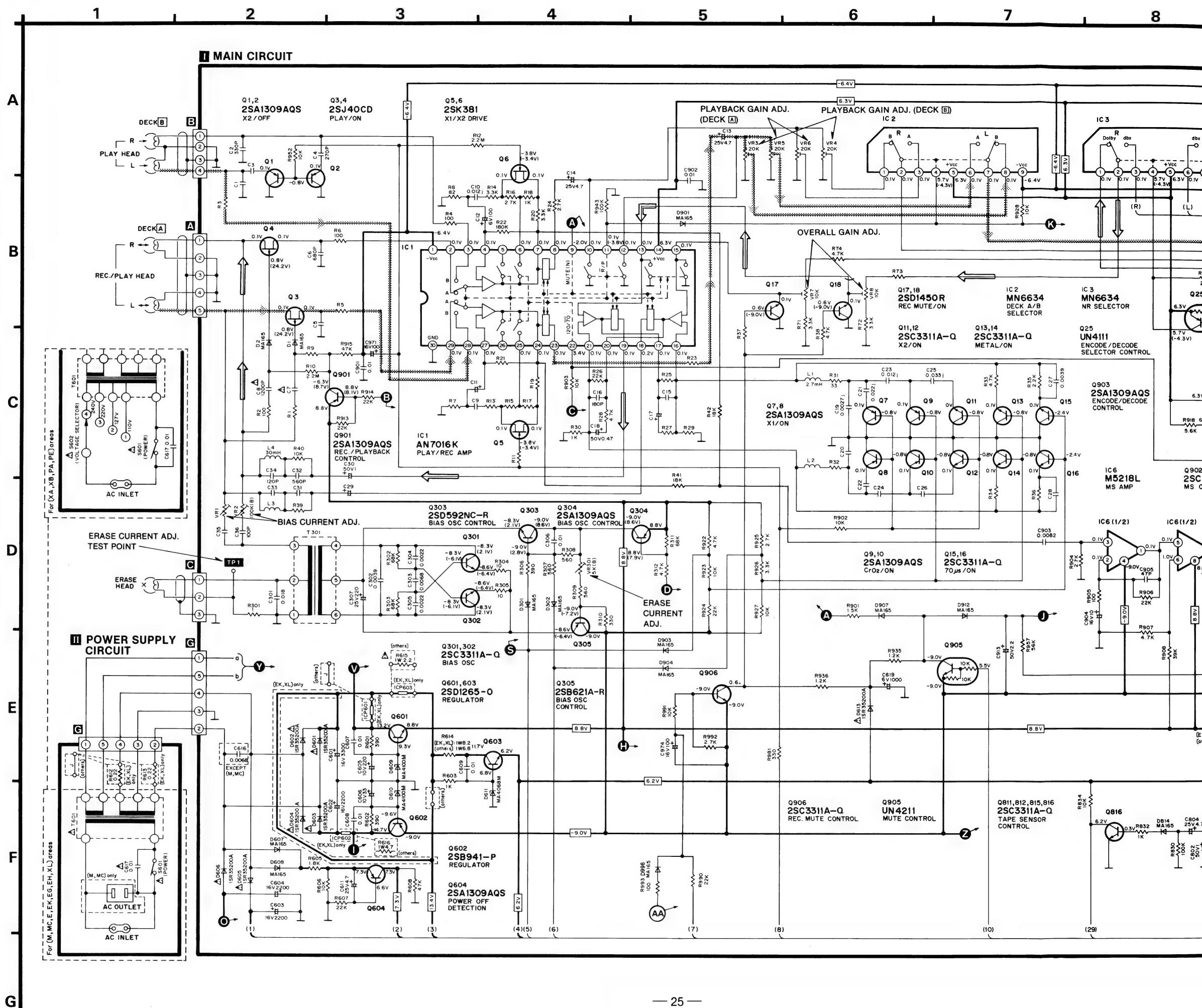
Secondary trouble can be prevented by repair.

*Cover the parts boxes made of

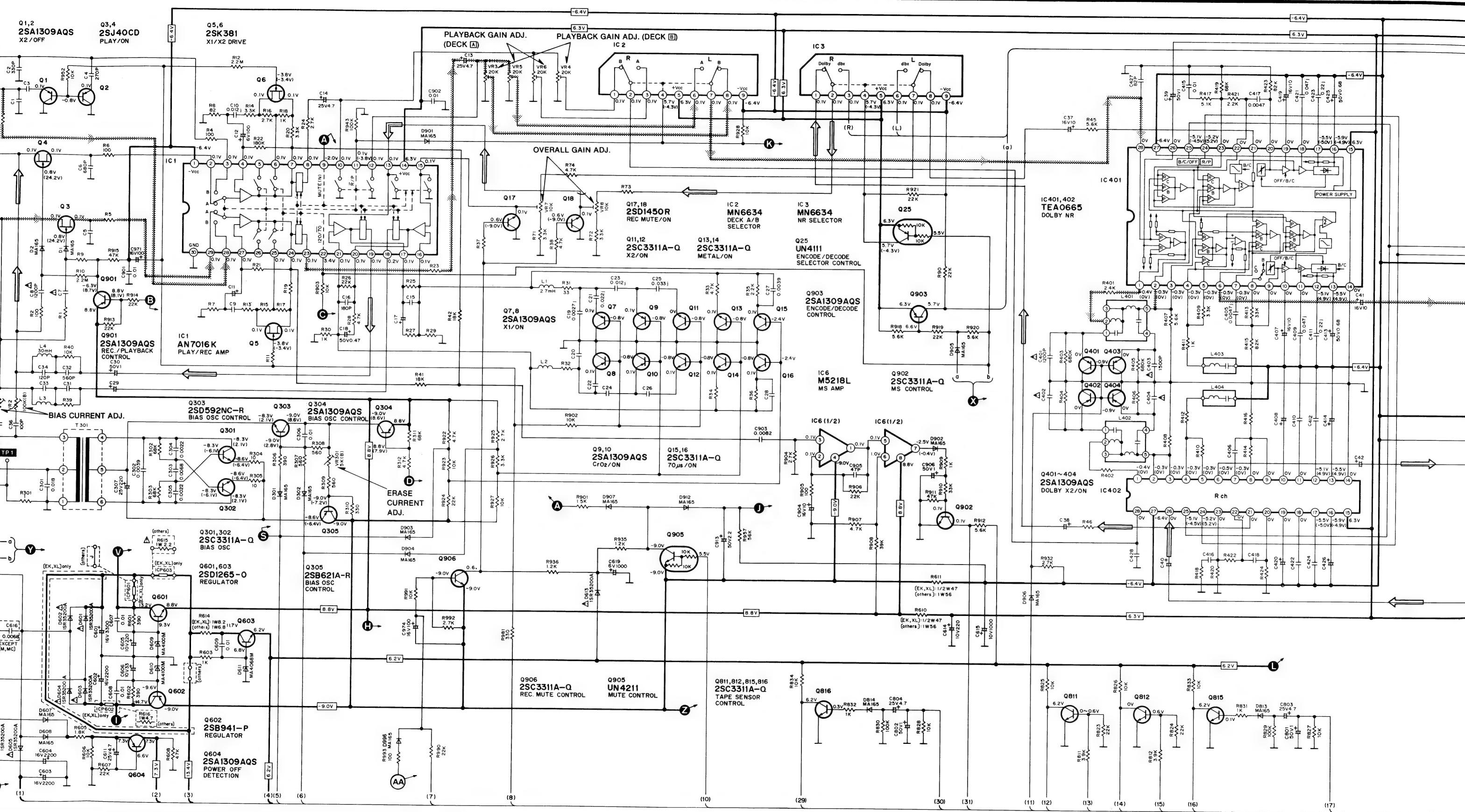
* Cover the parts boxes made of plastics with
* Ground the soldering iron.

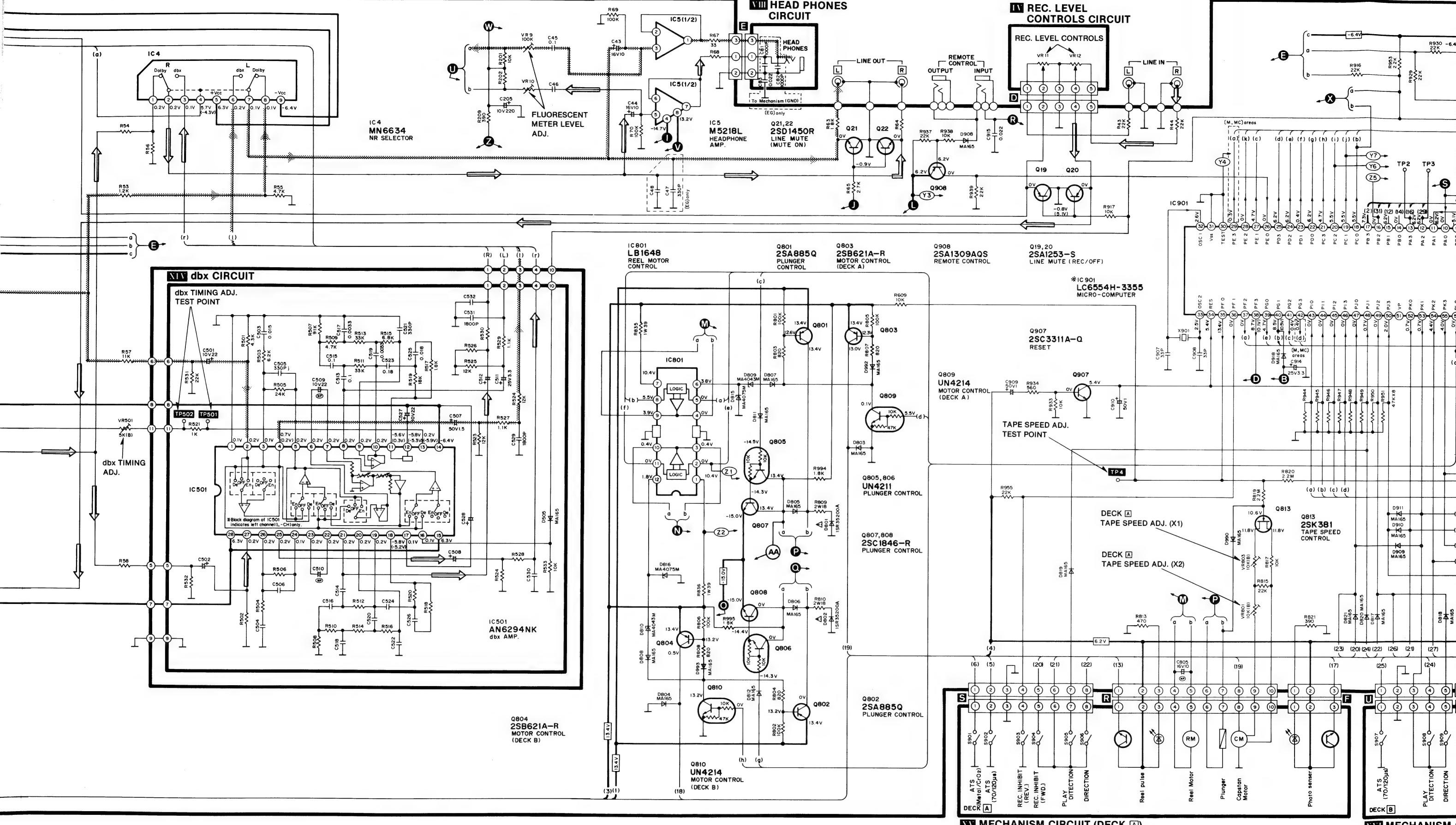
* Put a conductive mat on the work table.

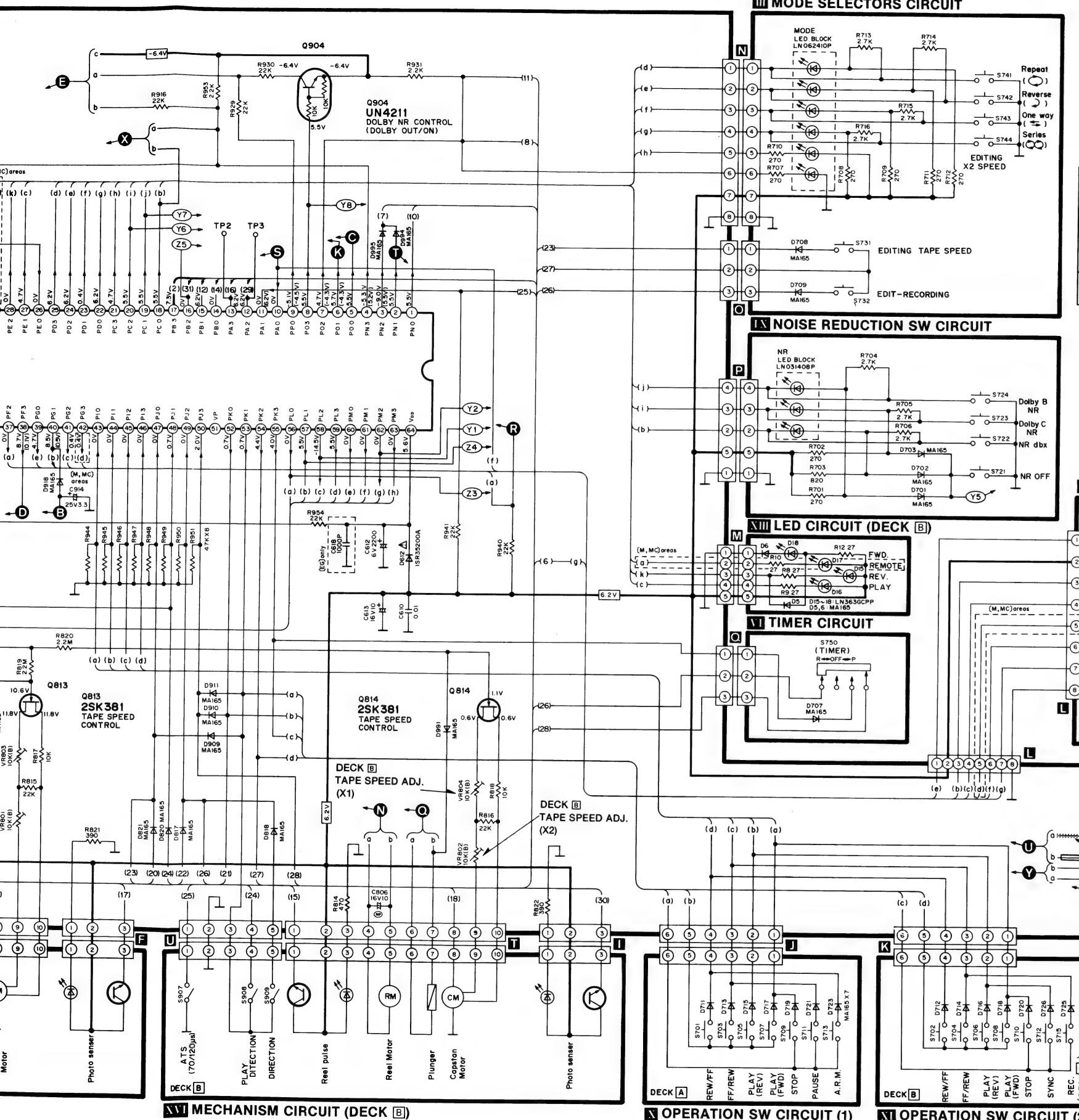
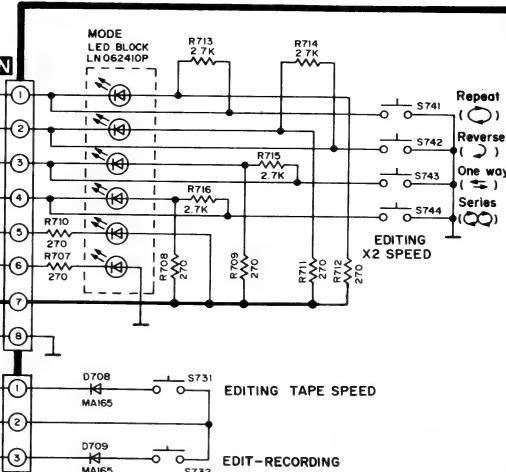
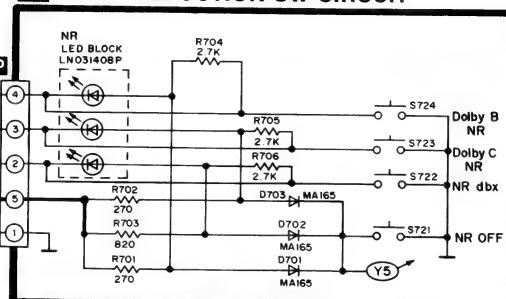
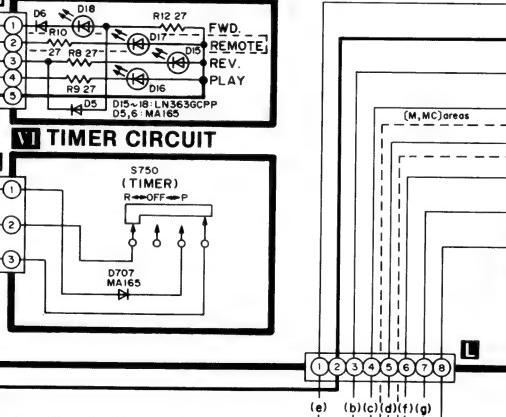
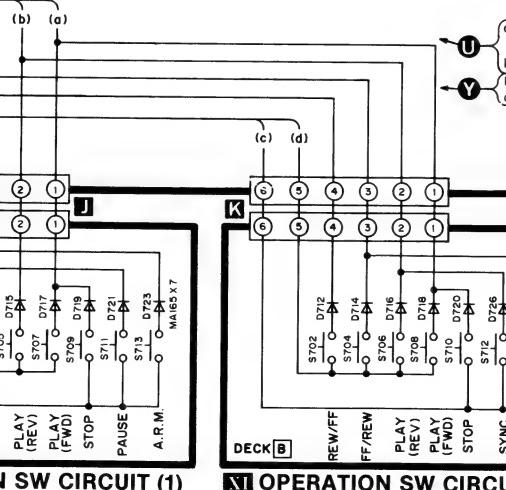
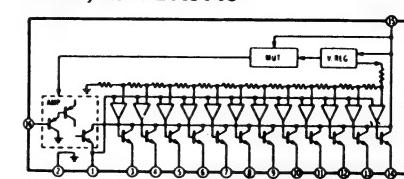
*Do not touch the legs of IC or LSI with the fingers directly.



MAIN CIRCUIT



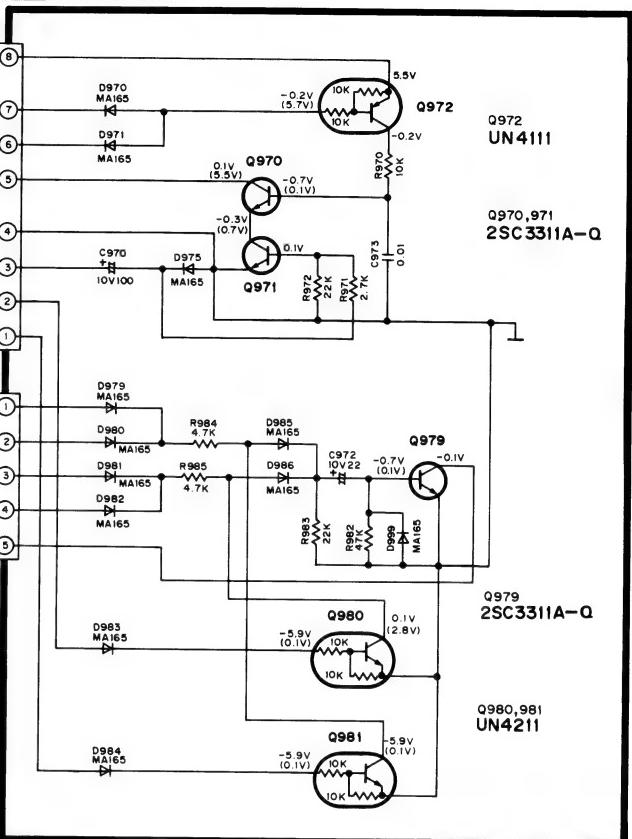
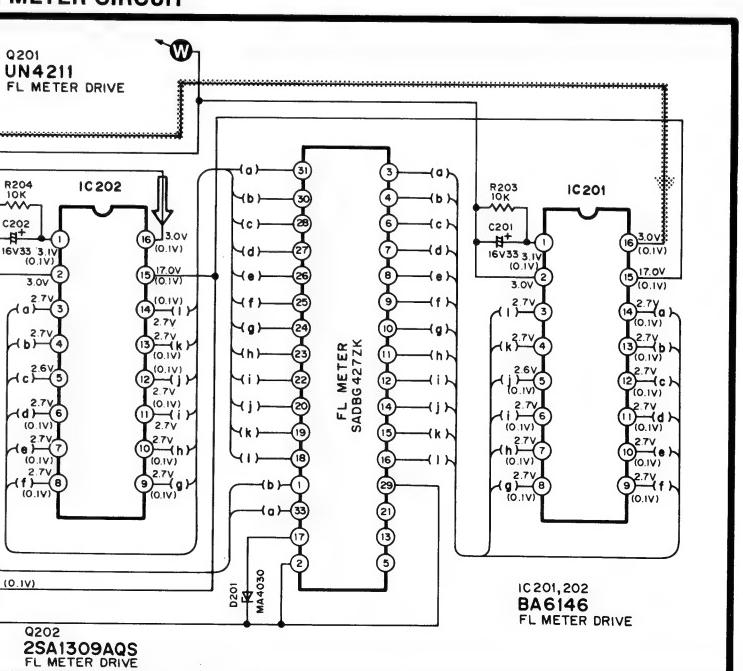


**III MODE SELECTORS CIRCUIT****IV NOISE REDUCTION SW CIRCUIT****V LED CIRCUIT (DECK B)****VI TIMER CIRCUIT****EQUIVALENT CIRCUIT****IC201, 202: BA6146****SPECIFICATIONS *Input level control...MAX**

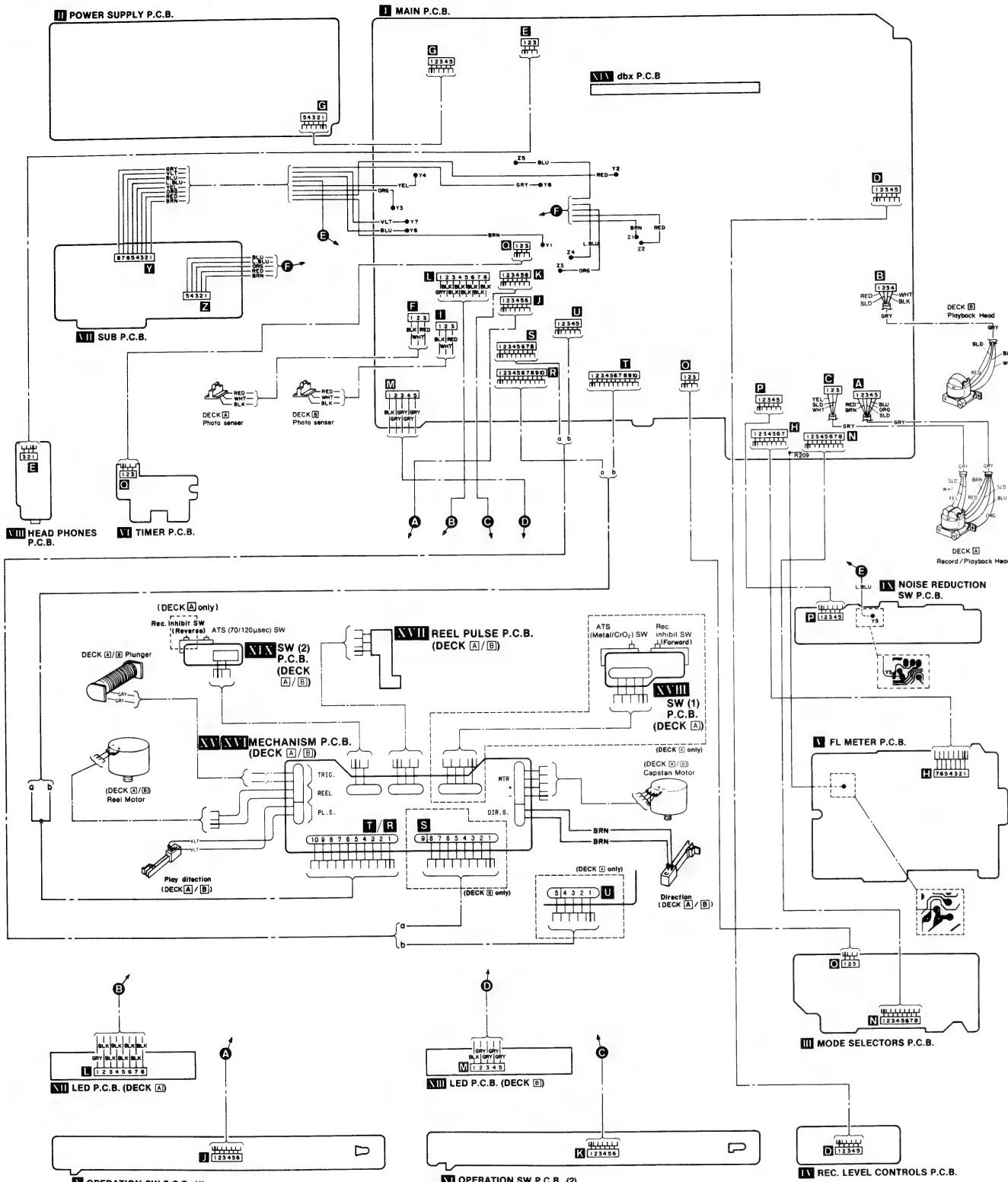
Playback S/N ratio *Test tape...QZZCFM	Greater than 45dB
Overall distortion *Test tape ...QZZCRA for Normal ...QZZCRX for CrO ₂ ...QZZCRZ for Metal	Normal... Less than 3.5% CrO ₂ , Metal... Less than 4%
Overall S/N ratio *Test tape...QZZCRA	Greater than 43dB (without NAB filter)

Caution!
The microcomputer for system control of this unit (Ref No. IC901) has been changed during production.

(OLD) LC6554H-3355 → (NEW) LC6554H-3426
New type is supplied as the replacement part.

VII SUB CIRCUIT**V FL METER CIRCUIT**

WIRING CONNECTION DIAGRAM



REPLACEMENT PARTS LIST

Notes: * Bracketed indications in Ref. No. columns specify the area.
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Code	Description	Ref. No.	Part No.	Part Code	Description
CASSETTE DECK							
101	SMQA1043	005 500 7741 7	SCREW	(E, EH, EG)			
102	SMQA1118	001 270 1891 9	MAGNETIC HEAD	(EK)	145	SMQA1066	016 756 0085 3
			TAPE B				WHEEL
102	SMQA1141		MAGNETIC HEAD	(M, MC, XL)			TAPE A
			TAPE A	(XA, XB, PA)			TAPE A
103	SMQA1046	005 507 1969 8	NUT	(PE)	146	SMQA1123	016 745 0226 9
			TAPE B				GEAR
104	SMQA1047	016 641 0257 9	GUIDE		147	SMQA1097	016 643 1004 4
105	SMQA1048	001 036 0036 2	PHOTO ELECTRIC TRANSDUCER		148	SMQA1068	016 650 5039 3
106	SMQA1049	016 726 0878 6	COIL SPRING		149	XTN26+C	005 501 0318 1
107	SMQA1050	016 726 0879 5	COIL SPRING		150	SMQA1069	016 718 3359 8
108	SMQA1051	016 630 1779 5	PLATE		151	SMQA1070	003 454 0638 6
109	SMQA1004	016 726 0826 8	SPRING		152	XTN26+C	005 501 0323 4
110	SMQA1164	016 713 0416 3	SCREW		153	SMQA1071	016 643 0989 0
111	XTS3+6F	005 501 3545 0	TAPPING SCREW		155	SMQA1073	016 718 3360 5
112	SMQA1005	016 740 0114 1	ROLLER		156	SMQA1074	016 752 0127 0
113	SMQA1006	016 726 0825 9	SPRING		157	SMQA1124	016 754 0077 3
114	SMQA1052	016 740 0121 2	ROLLER				ANGULAR BELT
115	SMQA1053	016 726 0880 2	COIL SPRING				
116	SMQA1091	016 628 1061 4	INDICATION PLATE, LABEL				
117	SMQA1054	016 630 1780 2	PLATE		158	SMQA1125	002 310 2495 4
118	SMQA1010	016 765 0056 7	WASHER		159	SMQA1036	002 310 2270 9
119	SMQA1013	016 913 0004 5	REEL		160	SMQA1076	016 631 0055 3
120	SMQA1026	016 913 0003 6	REEL				FRAME HOLDER
121	SMQA1014	016 641 0246 2	WASHER				DET. LEVER
122	SMQA1007	016 862 1041 8	WASHER		161	XTN26+F	005 501 0310 9
							SCREW
					162	SMQA1223	016 632 1950 2
					165	SMQA1079	016 640 0487 2
					166	XYN26+C	005 503 0554 1
					167	SMQA1080	016 717 0258 9
					168	SMQA1081	016 717 0259 8
					169	SMQA1082	016 726 0884 8
					170	SMQA1083	016 726 0886 6
					171	SMQA1148	016 632 1947 7
					172	SMQA1149	016 632 1946 8
					173	SMQA1114	016 718 3414 8
					174	SMQA1131	016 718 3378 5
					175	SMQA1133	016 726 0935 4
					176	XTS24+F	005 501 4873 3
					177	SMQA1221	016 643 1080 2
					178	SMQA1222	016 713 0438 7
					179	XTN3+5C	005 501 3249 5
					180	SMQA1058	003 435 6131 1
					181	SMQA1059	003 435 6132 0
					182	SMQA1021	016 643 0965 8
					183	SMQA1041	001 035 0392 0
					184	SMQA1022	016 643 0964 9
					185	SMQA1040	003 434 1025 7
					186	SJT30540LX-V	003 410 5996 1
							CONNECTOR(5-P)
							TAPE B
					186	SJT30640LX-V	003 410 6149 8
							CONNECTOR(6-P)
					186	SJT30840LX-V	003 410 5998 9
							CONNECTOR(8-P)
					186	SJT31040LX-V	003 410 6112 1
							TAPE A
							LUG TERMINAL
							TAPE A

MECHANIC

SPECIFICATIONS

NOTE: The value indicated fluctuates during In that case, obtain

Pressure of pressure ro

Takeup tension
* Use cassette torque meter.....QZZSRKCT

Wow and flutter; (JIS)
* Use test tapeQZZCWAT

NOTES:

- When changing mechanical parts, add grease to the area marked "Mechanical Parts Location".

Ref. No.	Part
1	MOLYKOTE

■ MECHANICAL PARTS LOCATION

SPECIFICATIONS

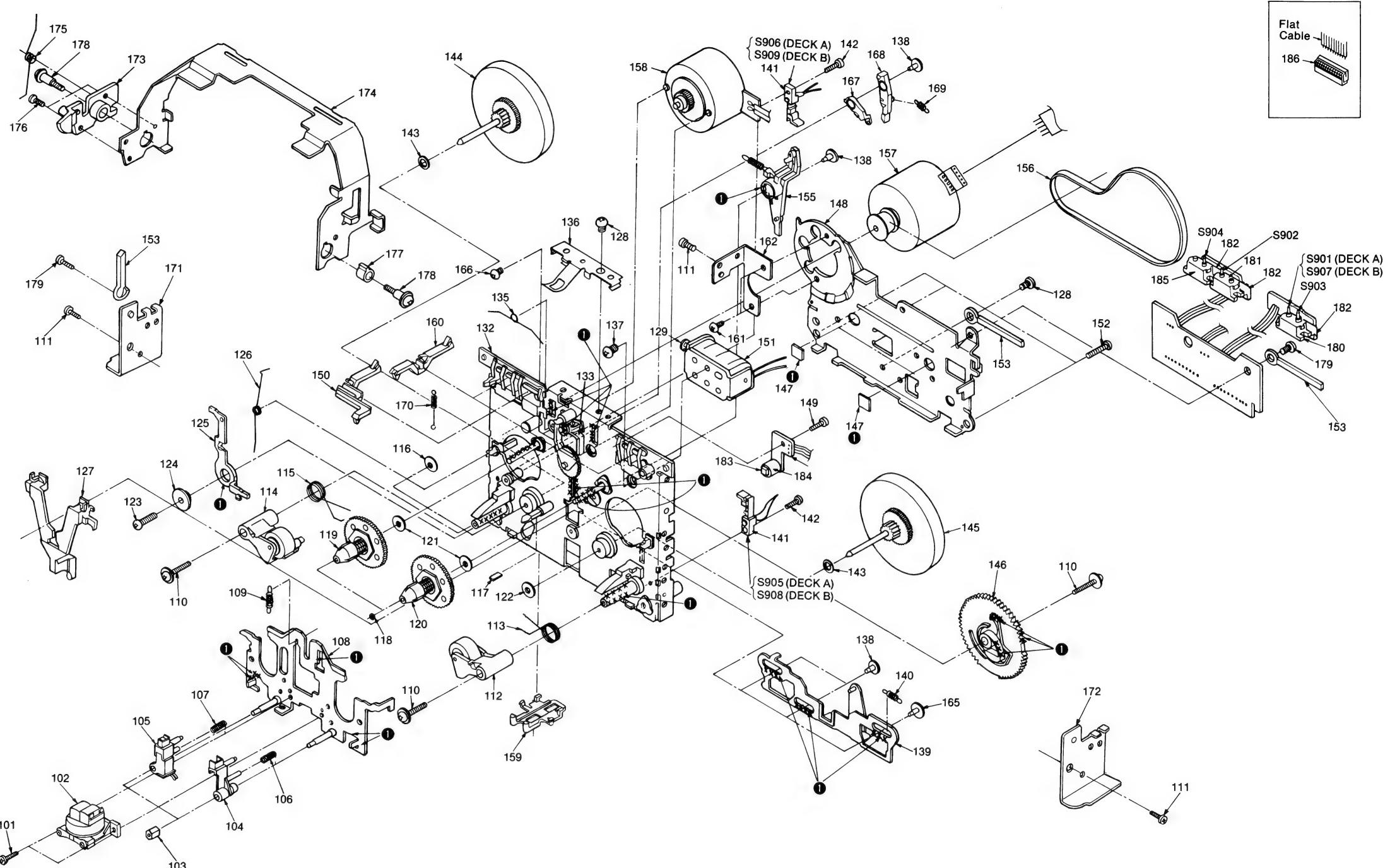
NOTE: The value indicated by the torque tape may fluctuate during torque measurement.
In that case, obtain the middle of the values.

Pressure of pressure roller	350±50g
Takeup tension * Use cassette torque meter.....QZZSRKCT	30~60g·cm
Wow and flutter; (JIS) * Use test tapeQZZCWAT	Less than 0.07% (WRMS) [EG] 0.08% (WRMS) [E, EH, EK] 0.14% (WRMS) [others]

NOTES:

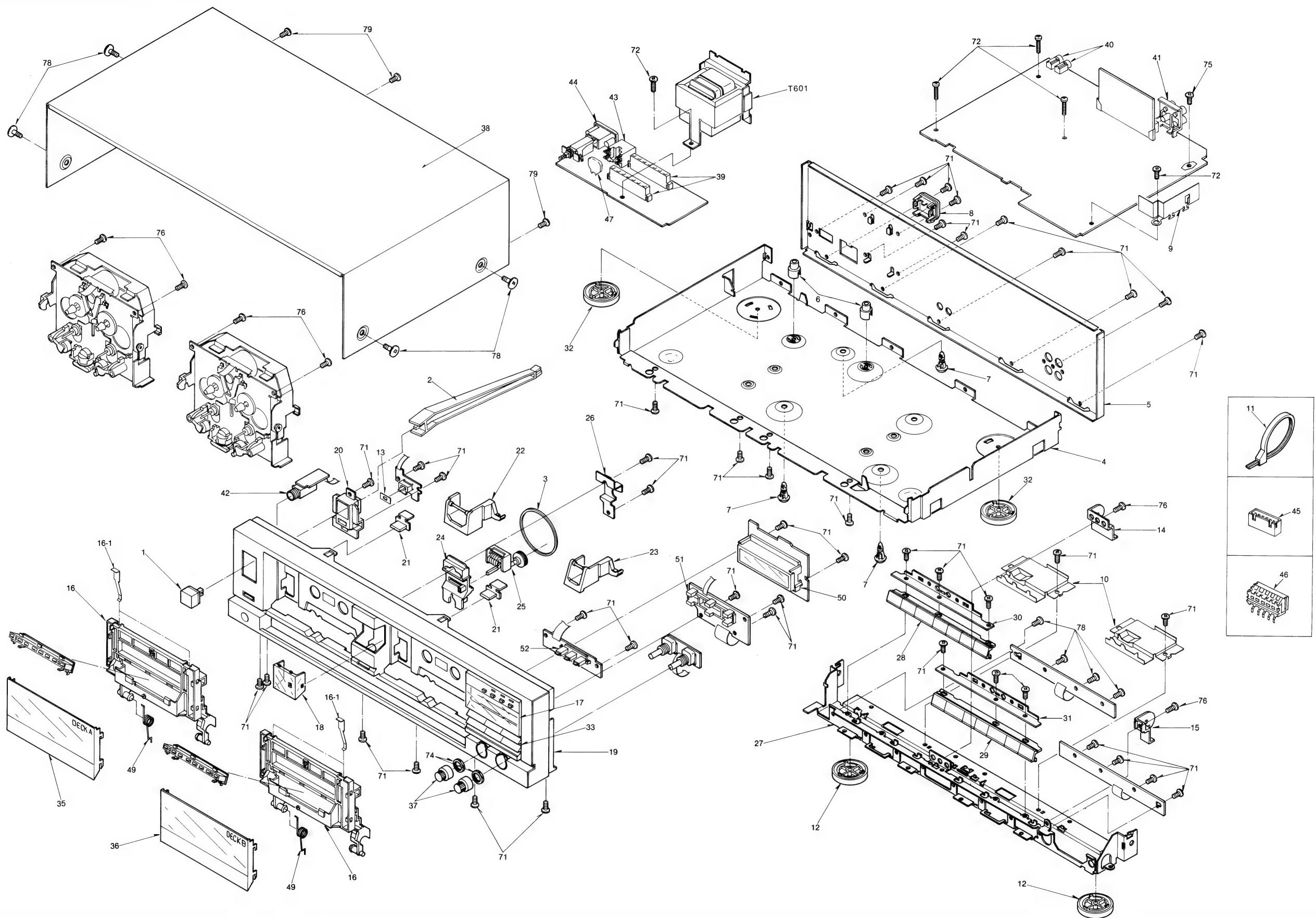
- When changing mechanism parts, apply the specified grease to the areas marked "x x" shown in the drawing "Mechanical Parts Location".

Ref. No.	Part Name	Part No.
①	MOLYKOTE	RZZ0L05



176 179 175 178	173	171	174 177 170 178 160 166	160	183 161 162	184	167 168	169 165	172	185	182 181 182 186 179 180 182
101 111 102 127 123 105 124 110 103 125 107 126 104 109 114 115 106 119 108 118 116 110 120 121 117 112 113 122	153	150	143 144 132 135 159	136 133 137 158	141 151 141 147 155 149 142 148 142 138 157	147 143 138 138 140 139 145 146 153 156 152	128 129 111	128 110	111	153	

CABINET PARTS LOCATION



78	76	76	71	79	71	71	74	78	71	79	71	71	71	71	71	71	71	71	72	71	78	71	76	71	71	72	76	71	75			
35	49	36	38	49	42		37	33	52	47	32	26	43	44	39	51	50	7	6	12	4	7	27	28	30	29	31	32	40	41	45	46
16-1	16	1	18	16	16-1	20	13	21	24	2	22	21	17	25	3	19	23						8	7	5	10	12	14	9	11		

REPLACEMENT PARTS LIST

Notes: * Important safety notice:

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

* Bracketed indications in Ref. No. columns specify the area.

Parts without these indications can be used for all areas.

* \odot -marked parts are used for black only, while \circledcirc -marked parts are for silver type only.

* Part other than Δ -and \odot -marked are use for both black and silver type.

Ref. No.	Part No.	Part Code	Description	Ref. No.	Part No.	Part Code	Description
CABINET AND CHASSIS							
1 \odot	SBC66	016 702 5545 6	BUTTON, POWER	(XB)			
1 Δ	SBC66-5	016 702 6679 9	BUTTON, POWER	35	SGXST55R-SM	016 820 0639 2	CASSETTE LID
2	SUB266-1	016 712 0372 3	ROD	36	SGXST55R-KE1	016 846 3909 5	CASSETTE LID
3	SMQ20022	016 754 0076 4	COUNTER BELT	(E, EH, EG)			
4	SKU11750	016 802 2204 9	BOTTOM BOARD	(EK, XL, XA)			
5	SGP7140-1B	016 840 8045 8	REAR PANEL	(XB)			
(E)				36	SGXST55R-KM1	016 820 0640 9	CASSETTE LID
(EH, EG)	SGP7140-1D	016 840 8135 7	REAR PANEL	(M, MC, PA)			
5 Δ	SGP7140-1F	016 840 7925 9	REAR PANEL	(PE)			
5 Δ	SGP7140-1H	016 840 8134 8	REAR PANEL	(E, EH, EG)			
5 Δ	SGP7140-2B	016 840 8005 6	REAR PANEL	(EK, XL, XA)			
(XA, XB, PA)				(XB)			
(PE)				36	SGXST55R-SM1	016 820 0638 3	CASSETTE LID
5 Δ	SGP7140B	016 840 7953 5	REAR PANEL	(M, MC)			
(M, MC)				37 \odot	SBN1228	016 700 2005 1	KNOB
6	SHE185	016 918 0330 9	SPACER	37 \odot	SBN1228-1	016 700 2006 0	KNOB
7	SHR5804	016 652 0655 8	PLASTIC SPACER	38 \odot	SKC2100K99	016 800 3147 7	CABINET BODY
8	SJS9331A	003 403 7236 7	AC OUTLET COVER	38 \odot	SKC2100S98	016 800 3158 4	CABINET BODY
(M, MC)				39	SJS501	003 403 7434 3	CONNECTOR
9	SMC1267	016 601 0648 2	SHIELD COVER	40	SJJ141-1	003 440 7804 8	JACK, SOCKET
11	SHR301	016 645 0044 0	CLAMPER	41	SJF3057NK	003 410 8123 0	TERMINAL BOARD
12	SKL310	016 828 0332 8	FOOT	42	SJJ134B	003 400 7050 0	JACK, HEADPHONES
13	SHR6076	016 652 0868 7	PLASTIC SPACER	43 Δ	SJS9331B	003 403 7275 0	AC OUTLET
14	SMQST33R-KM	016 652 0870 3	HOLDER ASSY	(M, MC)			
15	SMQST33R-KM1	016 652 0869 6	HOLDER ASSY	44 Δ	SJSD16	003 400 7436 6	AC INLET
16	SGXST33R-KM2	016 846 3913 9	CASSETTE LID	(E, EH, EG)			
16-1	QBP2006A	015 727 0706 8	SPRING	(EK, XA, XB)			
17	SGU557	016 842 1683 2	FILTER	(PA, PE)			
18 Δ	SGU558	016 842 1682 3	FILTER	45	SJT3319	003 403 3892 7	CONNECTOR
18 \odot	SGU558-1	016 842 1713 3	FILTER	45	SJT3415	003 403 3909 5	CONNECTOR(4-P)
19 Δ	SGYST55R-KM	016 840 8054 7	FRONT PANEL (K)	45	SJT3511	003 403 3893 6	CONNECTOR(5-P)
19 \odot	SGYST55R-SM	016 840 8133 9	FRONT PANEL (S)	45	SJT3809	003 410 6013 3	CONNECTOR
20 Δ	SGX7916	016 846 3870 3	ORNAMENT	46	SJT30340LX-V	003 410 6075 9	CONNECTOR(3-P)
20 \odot	SGX7916-1	016 846 3912 0	ORNAMENT	46	SJT30540LX-V	003 410 5996 1	CONNECTOR(5-P)
21 Δ	SBC776	016 702 6300 1	BUTTON	46	SJT30640LX-V	003 410 6149 8	CONNECTOR(6-P)
21 \odot	SBC776-1	016 702 6576 5	BUTTON	46	SJT30840LX-V	003 410 5998 9	CONNECTOR(8-P)
22	SMG40024	016 718 3406 6	EJECT LEVER	47	SMX888	016 600 0358 4	SHIELD PARTS
23	SMG40025	016 718 3409 5	EJECT LEVER	(E, EH, EG)			
24	SGX7920	016 846 3868 7	ORNAMENT	(EK, XL, XA)			
25	SJN27	016 892 0132 2	TAPE COUNTER	(XB, PA, PE)			
26	SMN2050	016 632 1929 9	ANGLE	48	SUW3079	016 650 5415 2	BRACKET, FOR V.ADJ
27	SMN2047	016 632 1938 8	ANGLE	(XA, XB, PA)			
28 Δ	SBC951	016 702 7140 5	BUTTON	(PE)			
28 \odot	SBC951-1	016 702 7139 8	BUTTON	49	SUS862	016 726 1024 0	SPRING
29 Δ	SBC953	016 702 7142 3	BUTTON	50	SHE224	016 918 0635 5	PARTS KIT
29 \odot	SBC953-1	016 702 7218 0	BUTTON	51	LN068410P	001 033 0356 4	DIODE, GAASP
30	SMN2048	016 632 1927 1	ANGLE	52	LN031408P	001 033 0355 5	DIODE, GAASP
31	SMN2049	016 632 1939 7	ANGLE				
32	SKL310	016 828 0332 8	FOOT				
33 Δ	SBCST55R-KM	016 702 7220 6	BUTTON	71	XTB3+8JFZ	005 501 0138 3	SCREW
33 \odot	SBCST55R-SM	016 702 7219 9	BUTTON	72	XTB3+16JFZ	005 501 1169 2	SCREW
35 Δ	SGXST55R-KE	016 846 3907 7	CASSETTE LID	73	XTB3+6FFZ	005 501 1590 3	SCREW
(E, EH, EG)				74	XNS9	005 507 0574 7	NUT
(EK, XL, XA)				75	XTB3+10JFR1	005 501 4861 7	TAPPING SCREW
(XB)				76	XTB3+12JFZ	005 501 2078 0	SCREW
35 Δ	SGXST55R-KM	016 820 0641 8	CASSETTE LID	77	XTS3+8JFZ	005 501 2270 2	SCREW
(M, MC, PA)				78 \odot	SNE2129	005 500 8058 5	SCREW
(PE)				78 Δ	SNE2129-1	005 500 7938 6	SCREW
35 Δ	SGXST55R-SE	016 846 3908 6	CASSETTE LID	79 \odot	XTB3+8J	005 501 1535 0	SCREW
(E, EH, EG)				79 Δ	XTB3+8JFZ	005 501 0138 3	SCREW
(EK, XL, XA)				80	XTB3+8JFZ	005 501 0138 3	SCREW
				(XA)			
SCREWS, WASHERS & NUTS							

Ref. No.	Part No.	Part Code	Description	Ref. No.	Part No.	Part Code	Description
PACKINGS							
P1 (KM)	SPG5996	016 971 5179 7	CARTON BOX	A1 (M)	SQF12944	016 983 5361 5	INSTRUCTION BOOK
P1 (KMC, KE, KEH)	SPG5997	016 971 5128 8	CARTON BOX	A1 (MC)	SQF12945	016 983 5398 2	INSTRUCTION BOOK
P1 (KEG, KEK)				A1 (XB)	SQF13044	016 983 5399 1	INSTRUCTION BOOK
P1 (KXA)				A1 (PA, PE)	SQF13045	016 983 5400 5	INSTRUCTION BOOK
P1 (SE, SEH, SEG)	SPG5998	016 971 5178 8	CARTON BOX	A1 (XL, XA)	SQF13067	016 983 5401 4	INSTRUCTION BOOK
P1 (SEK, SXA)				A2 Δ (E, EH, EG)	SFDAC05E03	003 490 4809 5	POWER CORD
P2 (XL)	SPS4991	016 977 3347 7	PAD	A2 Δ (E, EH, EK)	SFDAC05G02	003 490 2613 3	POWER CORD
(KM, KMC, E)				A2 Δ (XA, PA, PE)	SJA168-1	003 490 4122 9	POWER CORD
(EH, EG, EK)				A2 Δ (XA)	SJA172	003 490 4069 7	POWER CORD
(XL, XA)				A2 Δ (M)	SJA172-1	003 490 4930 5	POWER CORD
P3 (KA)	SPS4992	016 977 3348 6	PAD	A2 Δ (A)	SJA173	003 490 4161 2	POWER CORD
(XL)				A2 Δ (XL)	SJA183	003 490 4873 7	POWER CORD
P4 (P)	SPS4905	016 977 3274 7	PAD	A3 (XB)	SJP225TT	003 492 6803 3	CORD
P5 Δ	SPP756	016 978 0540 5	PROTECTION COVER	A3 (M, MC)	SJP225TT	003 492 6803 3	CORD

Service Manual

Cassette Deck

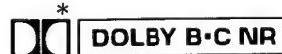
Supplement

** dbx®/Dolby B-C NR, Auto-Reverse
Double Cassette Deck

RS-T55R

Color

(K)...Black Type
(S)...Silver Type



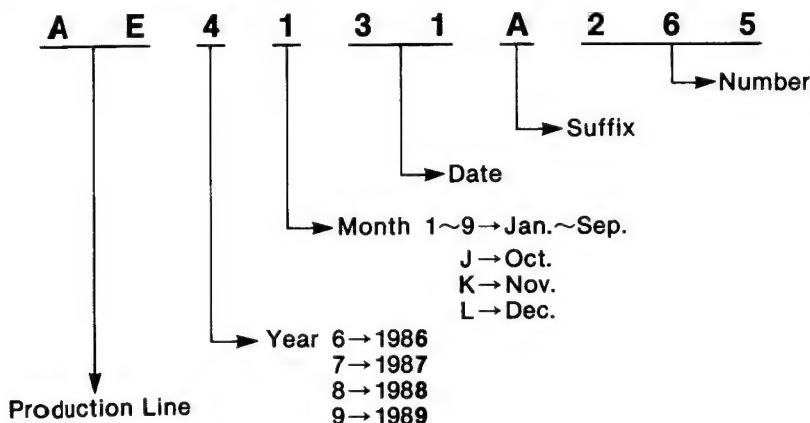
Please file and use this supplement manual together with the service manual for Model No. RS-T55R, Order No. HAD8705141C0.

Note:

This supplement has been issued to inform you that the Microcomputer (Ref. No. IC901) has been changed in units having serial number suffixes "C" or later. (Refer to "How to read the serial number" shown below).

Color	Areas
(K)	[M]U.S.A.
(K) (S)	[MC]....Canada.
(K) (S)	[E]All European areas except United Kingdom.
(K) (S)	[EK].....United Kingdom.
(K) (S)	[EG]....F.R. Germany.
(K) (S)	[EH]....Holland.
(K) (S)	[XA].....Asia, Latin America, Middle Near East and Africa.
(K) (S)	[XL]Australia.
(K) (S)	[XB]....Saudi Arabia.
(K)	[PA]....Far East PX.
(K)	[PE]....European Military.

● How to read the serial number



* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

** The term dbx is a registered trademark of dbx Inc.

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CHANGES

REPLACEMENT PARTS LIST

Notes: • Part numbers are indicated on most electrical parts. Please use this part number for parts order.

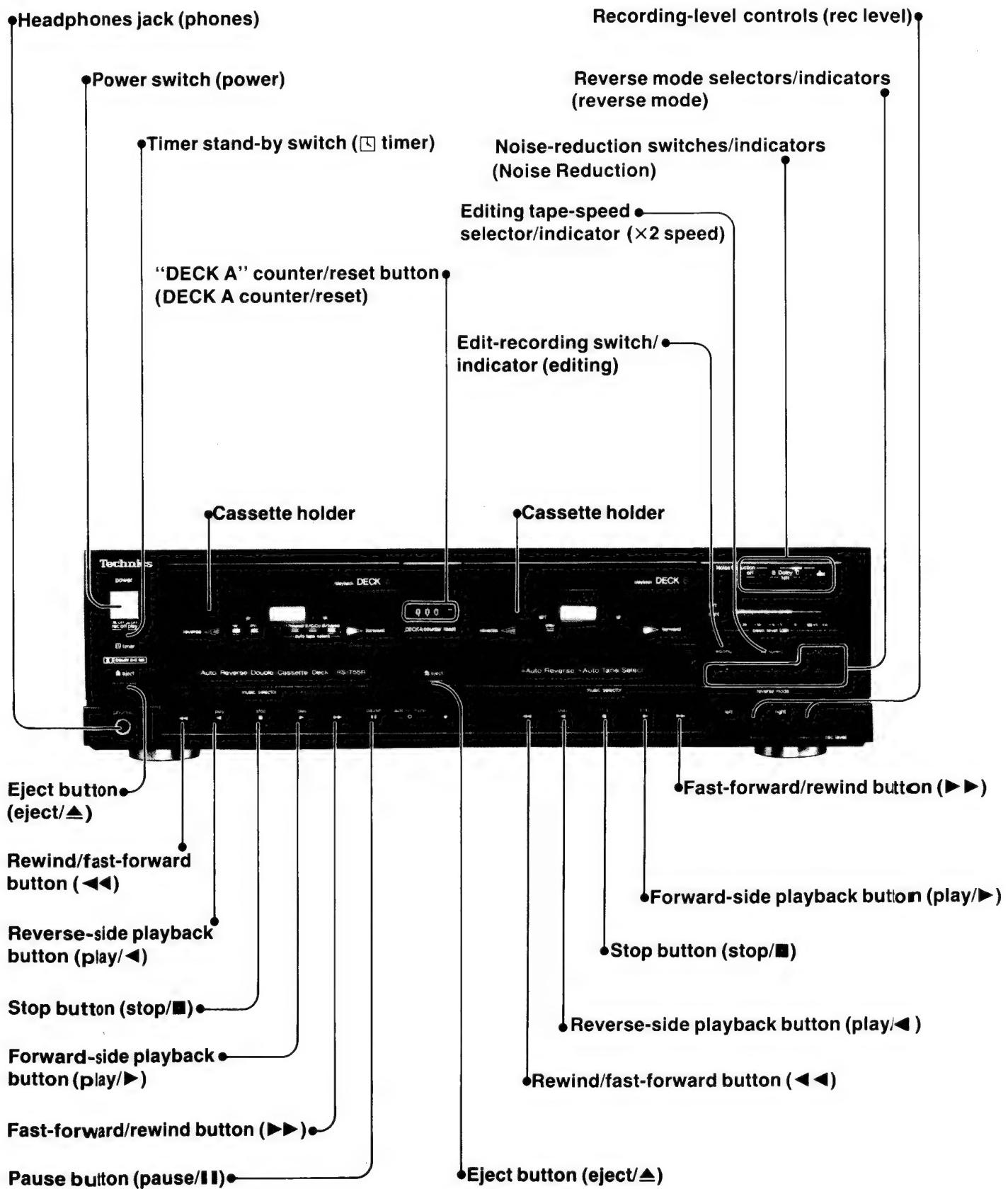
- Important safety notice:

Components identified by Δ mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

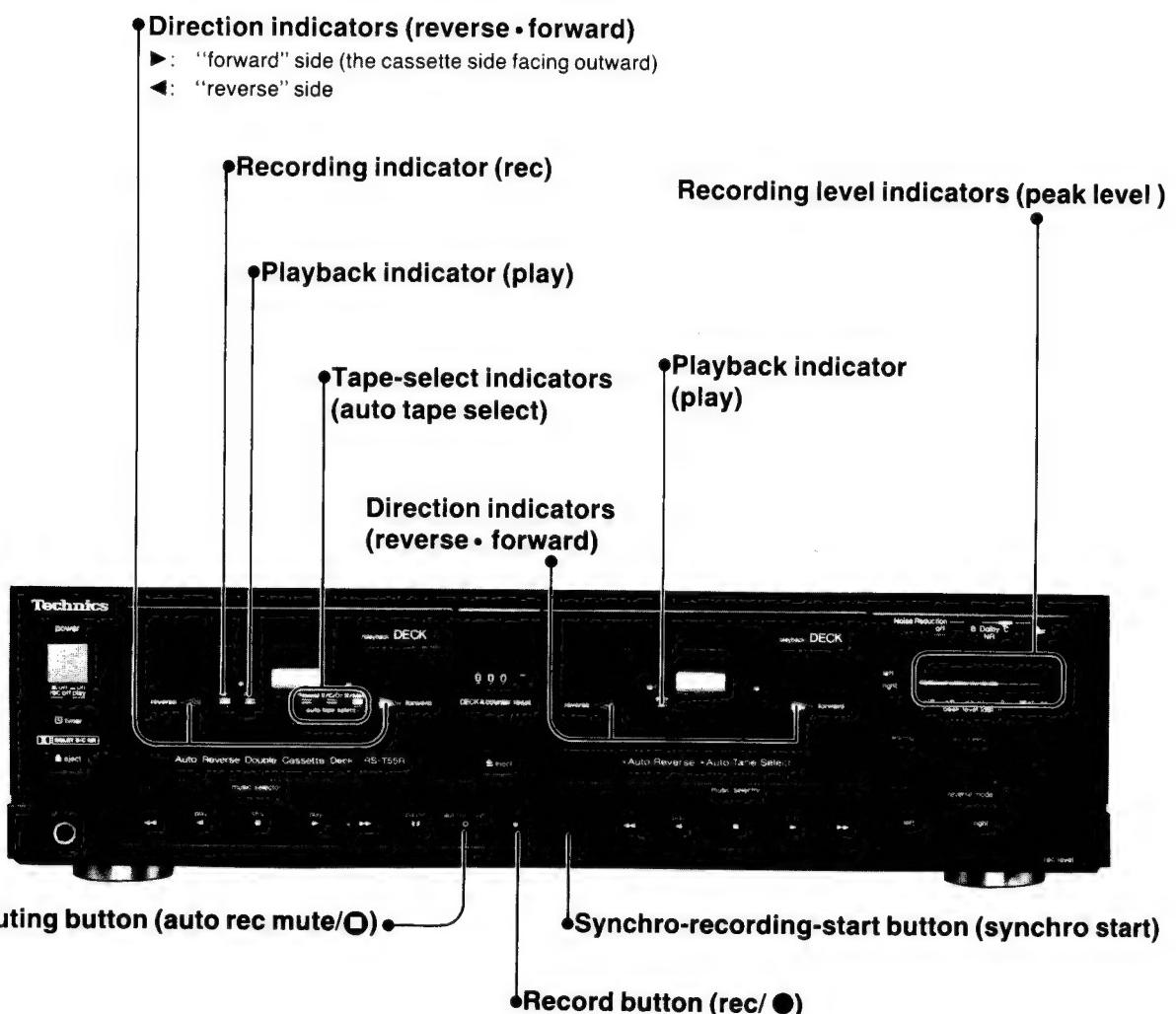
Ref. No.	Change of Parts No.		Part Name & Description	Remarks
	OLD	→ NEW		
RESISTORS				
R970	ERDS2TJ103	—	Carbon, 10k Ω , 1/4W	Deletion
R971	ERDS2TJ272	—	Carbon, 2.7k Ω , 1/4W	Deletion
R972	ERDS2TJ223	—	Carbon, 22k Ω , 1/4W	Deletion
R982	ERDS2TJ473	—	Carbon, 47k Ω , 1/4W	Deletion
R983	ERDS2TJ223	—	Carbon, 22k Ω , 1/4W	Deletion
R984, R985	ERDS2TJ472	—	Carbon, 4.7k Ω , 1/4W	Deletion
R990	ERDS2TJ223	—	Carbon, 22k Ω , 1/4W	Deletion
R991	ERDS2TJ103	—	Carbon, 10k Ω , 1/4W	Deletion
R992	ERDS2TJ272	—	Carbon, 2.7k Ω , 1/4W	Deletion
R993	ERDS2TJ101	—	Carbon, 100 Ω , 1/4W	Deletion
CAPACITORS				
C970	ECEA1AU101	—	Electrolytic, 100 μ F, 10V	Deletion
C972	ECEA1AK220	—	Electrolytic, 22 μ F, 10V	Deletion
C973	ECKD1H103PF	—	Ceramic, 0.01 μ F, 50V	Deletion
C974	ECEA1CU101	—	Electrolytic, 100 μ F, 16V	Deletion
C507, C508	ECEA1CKS100	ECEA1HK1R5	Electrolytic, 1.5 μ F, 50V	Correction
C511, C512	ECEA1HK010	ECEA1EK3R3	Electrolytic, 3.3 μ F, 25V	Correction
C523, C524	ECQV1H124JZ	ECQV1H184JZ	Polyester, 0.18 μ F, 50V	Correction
C915	ECKD1H223PF [EG]	ECKD1H333ZF	Ceramic, 0.033 μ F, 50V	Correction
TRANSISTORS				
Q970, Q971	2SC3311A-Q	—	TRANSISTOR	Deletion
Q972	UN4111	—	TRANSISTOR	Deletion
Q979	2SC3311A-Q	—	TRANSISTOR	Deletion
Q980, Q981	UN4211	—	TRANSISTOR	Deletion
DIODES				
D970, D971	MA165	—	DIODE	Deletion
D975, D979	MA165	—	DIODE	Deletion
D980, D981	MA165	—	DIODE	Deletion
D982, D983	MA165	—	DIODE	Deletion
D984, D985	MA165	—	DIODE	Deletion
D986, D990	MA165	—	DIODE	Deletion
D992, D993	MA165	—	DIODE	Deletion
D997, D999	MA165	—	DIODE	Deletion
D999	MA165	—	DIODE	Deletion

■ LOCATION OF CONTROLS



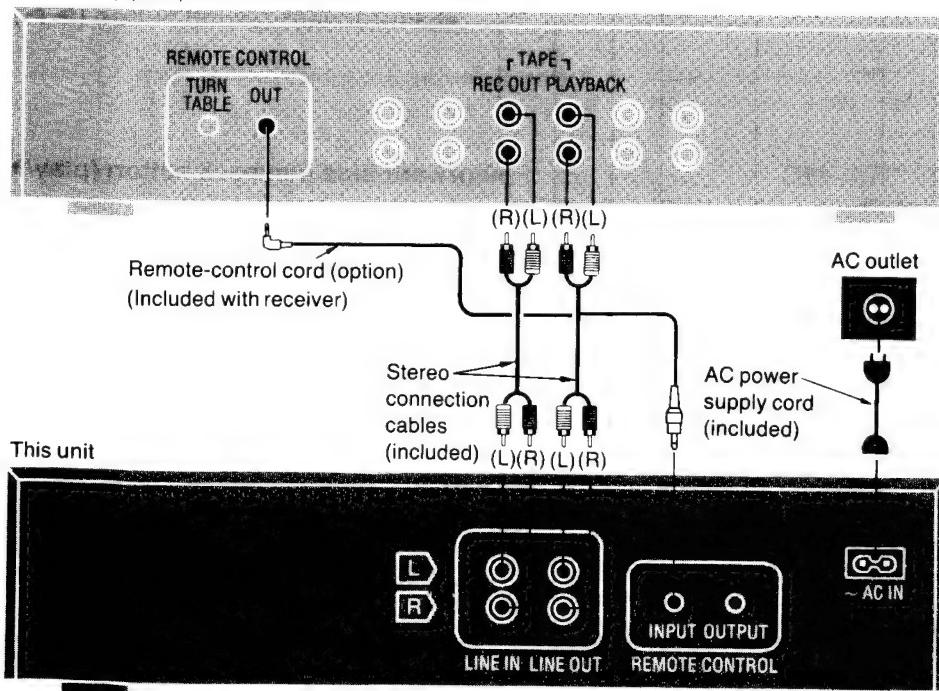
When using "DECK A"

When using "DECK B"



■ HOW TO CONNECTION

Receiver (option)



Configuration of AC power supply cord differs according to area.

■ Remote-control "INPUT" terminal

This terminal can be used only with Technics receivers or amplifiers having the appropriate remote-control terminal. (Contact your dealer for details.)

■ Remote-control "OUTPUT" terminal

This terminal can be used only with Technics graphic equalizers or compact disc players having the appropriate remote-control terminal. (Contact your dealer for details.)

Placement hints

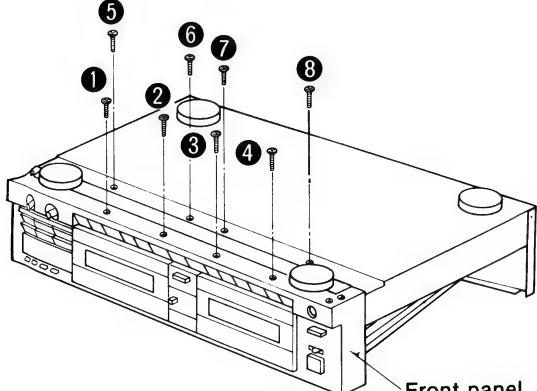
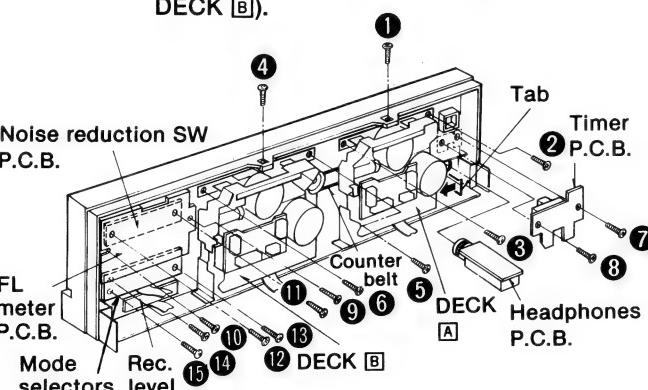
If this unit is placed near a receiver, a "hum" noise may be heard during tape playback, recording, or AM reception of the receiver.

If this occurs, leave as much space as possible between the units, or place them where there is the least amount of "hum".

■ DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1	How to remove the cabinet.
Procedure 1	<ul style="list-style-type: none"> Remove the 7 screws.
Ref. No. 2	How to remove the main P.C.B.
Procedure 1 → 2	<ul style="list-style-type: none"> Remove the 7 screws (①~⑦), and then remove the main P.C.B.
Ref. No. 3	How to remove the power supply P.C.B.
Procedure 1 → 2 → 3	<p>(Refer to the Fig. 1)</p> <ul style="list-style-type: none"> Pull out the connection rod from the power switch. Remove the 6 screws (⑧~⑬), and then remove the power supply P.C.B. and the rear panel together.
Ref. No. 4	How to remove the front panel.
Procedure 1 → 4	<ul style="list-style-type: none"> Remove the 8 screws (①~⑧), and then remove the front panel.
 Fig. 2	
Ref. No. 5	How to remove the mechanism units.
Procedure 1 → 4 → 5	<ul style="list-style-type: none"> Remove the 6 screws (DECK A: ①~③/DECK B: ④~⑥). Push the eject button. Remove the counter belt (for the mechanism unit of DECK A). Remove the mechanism units (DECK A/DECK B).
 Fig. 3	

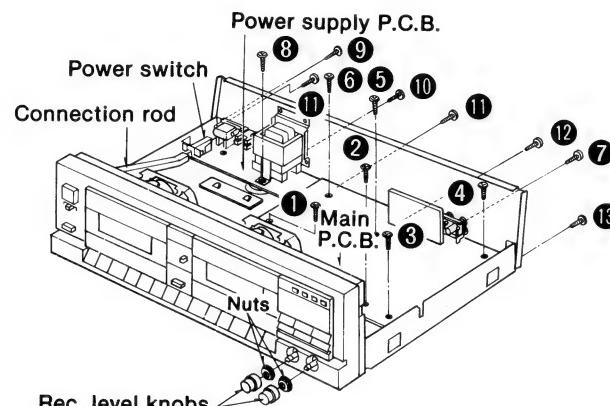
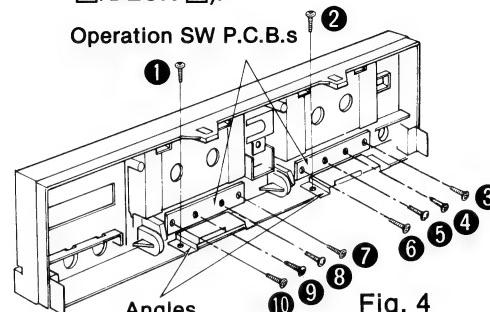
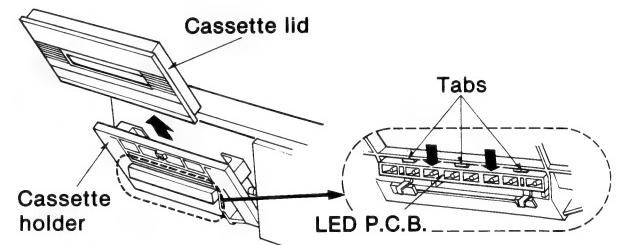
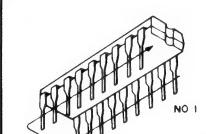
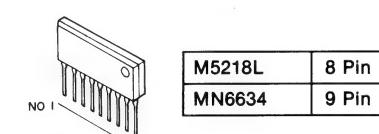
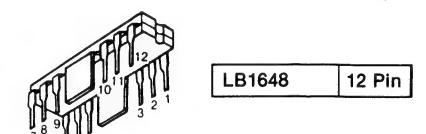
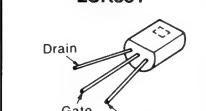
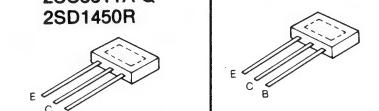
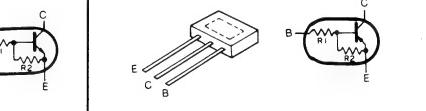
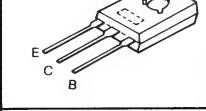
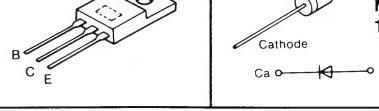
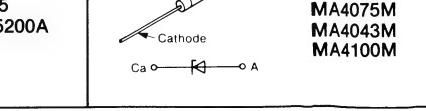
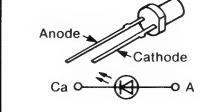
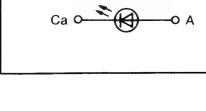


Fig. 1

Ref. No. 6	How to remove the printed circuit boards.	Ref. No. 7	How to remove the operation SW P.C.B.													
Procedure 1 → 4 → 6	<p>(Refer to the Fig. 3)</p> <ul style="list-style-type: none"> Remove the 2 screws (⑦, ⑧), and then remove the timer P.C.B. Push the tab aside, and then remove the headphones P.C.B. Remove the 2 screws (⑨, ⑩), and then remove the FL meter P.C.B. Remove the 2 screws (⑪, ⑫), and then remove the noise reduction SW P.C.B. Remove the 3 screws (⑬~⑯), and then remove the mode selectors P.C.B. Remove the 2 rec. level control knobs and the 2 nuts (refer to the Fig. 1), and then remove the rec. level controls P.C.B. 	Procedure 1 → 4 → 5 → 7	<ul style="list-style-type: none"> Remove the 2 screws (DECK A: ①/DECK B: ②), and the remove the angles. Remove the 8 screws (DECK A: ③~⑥/DECK B: ⑦~⑩), and then remove the operation SW P.C.B.s (DECK A/DECK B). 													
 Fig. 4		 Fig. 5														
Ref. No. 8	How to remove the LED P.C.B.															
Procedure 8	<ul style="list-style-type: none"> Remove the cassette lids (DECK A and/or DECK B). Push the 3 tabs in the direction of the arrow, and then remove the LED P.C.B.s (DECK A and/or DECK B). 															
■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES																
 NO 1		<table border="1"> <tbody> <tr> <td>BA6146</td><td>16 Pin</td></tr> <tr> <td>TEA0665</td><td>28 Pin</td></tr> <tr> <td>AN7016K</td><td>30 Pin</td></tr> <tr> <td>LC6554H-3355</td><td>64 Pin</td></tr> <tr> <td>AN6294NK</td><td>28 Pin</td></tr> </tbody> </table>	BA6146	16 Pin	TEA0665	28 Pin	AN7016K	30 Pin	LC6554H-3355	64 Pin	AN6294NK	28 Pin	 M5218L 8 Pin MN6634 9 Pin		 LB1648 12 Pin	
BA6146	16 Pin															
TEA0665	28 Pin															
AN7016K	30 Pin															
LC6554H-3355	64 Pin															
AN6294NK	28 Pin															
 2SJ40CD 2SK381 Drain Gate Source		 2SB621A-R 2SD592NC-R E C B		 2SA1309AQS 2SC3311A-Q 2SD1450R E C B		 UN4211, UN4214 E C B										
 2SA885Q 2SC1846-R E C B		 2SA1253-S E C B		 2SD1265-O 2SB941-P B C E		 MA165 1SR35200A Anode Cathode Ca o A										
 LN363GCPP (GREEN) LN463YCPPU (YEL) LN863RCPP (RED)																

MEASUREMENT AND ADJUSTMENT METHODS

Measurement Condition

- Recording level controls; Maximum
- Timer stand-by switch; Off
- Noise reduction switch; Off
- Editing switch; Off

Measuring instrument

- EVM(Electronic Voltmeter)
- Oscilloscope
- Digital frequency counter
- AF oscillator

Test tape

- Head azimuth adjustment (8kHz, -20dB); QZZCFM
- Tape speed adjustment (3kHz, -10dB); QZZCWAT
- Playback frequency response (315Hz, 12.5kHz, 10kHz, 8kHz, 4kHz, 1kHz, 250Hz, 125Hz, 63Hz, -20dB); QZZCFM

- Edit-recording switch; Off
- Editing tape speed selector; Off
- Make sure heads are clean
- Make sure capstan and pressure roller are clean
- Judgeable room temperature $20\pm 5^\circ\text{C}$ ($68\pm 9^\circ\text{F}$)

- ATT(Attenuator)
- DC voltmeter
- Resistor (600Ω)

HEAD AZIMUTH ADJUSTMENT (DECK A/B)

- Playback the azimuth adjustment portion (8kHz, -20dB) of the test tape (QZZCFM). Vary the azimuth adjusting screw until the outputs of the L-CH and R-CH are maximized and the lissajous waveform, as illustrated, approaches 0 degrees.

Note: If L-CH and R-CH are not maximized at the same point, adjust to the point where the levels of each channel are maximized and equal.

- Perform the same adjustment in the reverse play mode.

forward and reverse rotation level difference check

- Playback the gain adjustment portion (315Hz, 0 dB) of the test tape (QZZCFM), and then assure that the forward and reverse rotation level difference is within 1 dB.
- After the adjustment, apply screwlock to the azimuth adjusting screw.

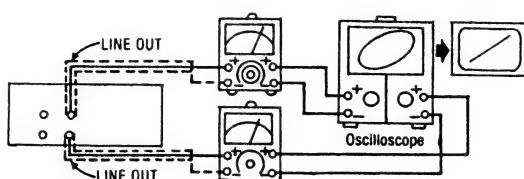


Fig. 1

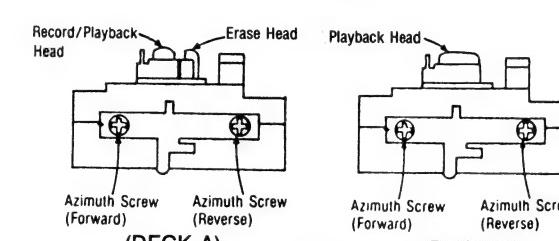


Fig. 2

TAPE SPEED ADJUSTMENT (DECK A/B)

High speed

- Shift the editing tape speed switch to "X2" and ground TP4.
- Playback the middle portion of the test tape (QZZCWAT).
- Adjust Deck B=VR802 and Deck A=VR801 (see Fig. 14) so that the output is within the standard value.

Normal speed

- Shift the editing tape speed switch to "X1" and remove the ground from TP4.
- Playback the middle portion of the test tape (QZZCWAT).
- Adjust Deck B=VR804 and Deck A=VR803 (see Fig. 14) so that the output is within the standard value.

Note: The High speed adjustment must be done before the Normal speed adjustment.

Standard value: $3000 \pm 15\text{Hz}$ (Normal), $6000 \pm 30\text{Hz}$ (High)

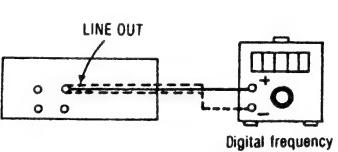


Fig. 3

PLAYBACK GAIN ADJUSTMENT (DECK A/B)

- Playback the gain adjustment portion (315 Hz, 0 dB) of the test tape (QZZCFM).
- Adjust Deck B=VR3 (L-CH) [[VR4 (R-CH)]] and Deck A=VR5 (L-CH) [[VR6 (R-CH)]] so that the output is within the standard value.

Standard value: $0.4V \pm 0.5\text{dB}$

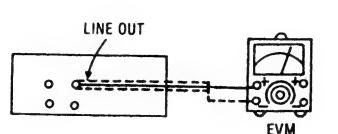


Fig. 4

PLAYBACK FREQUENCY RESPONSE (DECK A/B)

- Playback the frequency response portion (315 Hz, 12.5 kHz ~ 63 Hz, -20 dB) of the test tape (QZZCFM).
- Assure that the frequency response is within the range shown in Fig. 6 for both L-CH and R-CH.

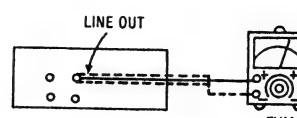


Fig. 5

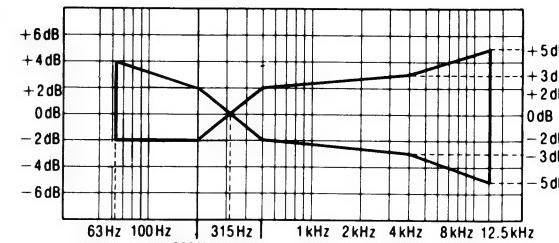


Fig. 6

ERASE CURRENT ADJUSTMENT (DECK A)

- Insert the Metal blank test tape (QZZCRZ) and set the unit to the Record Pause mode.
- Adjust VR301 so that the output between TP1 and GND is within the standard value.

Standard value: $170 \pm 5\text{mA}$ (Metal), $(170 \pm 5\text{mV})$

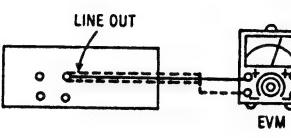


Fig. 7

OVERALL FREQUENCY RESPONSE (DECK A)

- Insert the Normal blank test tape (QZZCRA) and set the unit to the Record Pause mode.
- Apply a reference input signal (1 kHz, -24 dB) through an attenuator.
- Attenuate the signal by 20 dB and adjust the frequency from 50 Hz ~ 10 kHz.
- Record the frequency sweep.
- Playback the recorded signal and assure that it is within the range shown in Fig. 9 in comparison to the reference frequency (1 kHz).
- If it is not within the standard range, adjust VR1 (L-CH) and VR2 (R-CH) so that the frequency level is within the standard range.
 - Level up in high frequency range.....Increase the bias current.
 - Level down in high frequency range...Decrease the bias current.
- Repeat steps 2 ~ 6 above using the CrO₂ tape(QZZCRX) and the Metal tape(QZZCRZ) increasing the frequency range to 12kHz (50 Hz ~ 12.5 kHz).
- Assure that the level is within the range shown in Fig. 10.

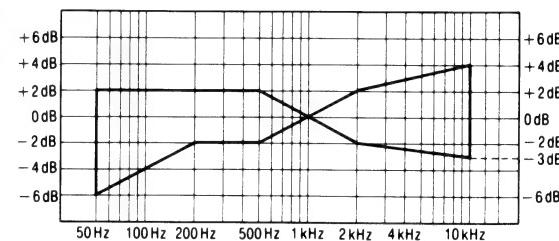


Fig. 9

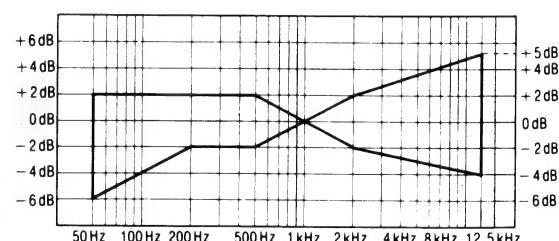


Fig. 10

OVERALL GAIN ADJUSTMENT (DECK A)

- Insert the normal blank test tape (QZZCRA) and set the unit to the Record pause mode.
- Apply a reference input signal (1 kHz, -24 dB). Attenuate the output so that its level becomes 0.4V.
- Record this input signal.
- Playback the signal recorded in step 3 above, and assure that the output is within the standard value.
- If it is not within the standard, adjust VR7 (L-CH) and VR8 (R-CH).
- Repeat the 2 ~ 5 above until the output is within the standard value.

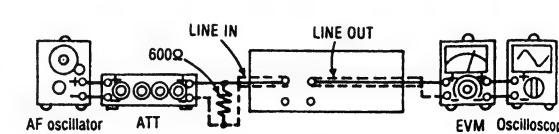


Fig. 11

FLUORESCENT METER LEVEL ADJUSTMENT

- Insert the Normal blank test tape(QZZCRA) and apply a reference input signal (1 kHz, -24 dB) in the Record Pause mode.
- Adjust the output to 0.4V by attenuator.
- Adjust **VR9** (L-CH) and **VR10** (R-CH) so that the 0 dB segment part is half lighted.

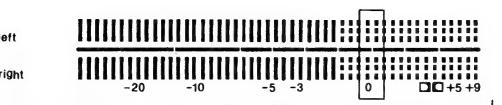


Fig. 12

dbx TIMING ADJUSTMENT

- Shift the noise reduction switch to the dbx position.
- Playback the gain adjustment portion (315 Hz, 0 dB) of the test tape (QZZCFM).
- Connect a DC voltmeter across **TP501** and **TP502**.
- Adjust **VR501** so that the output is within the standard value.

Standard value: DC16.6mV ± 0.5mV

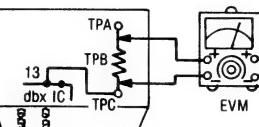


Fig. 13

TPA: TP501, TPB: R521, TPC: TP502

• Adjustment point

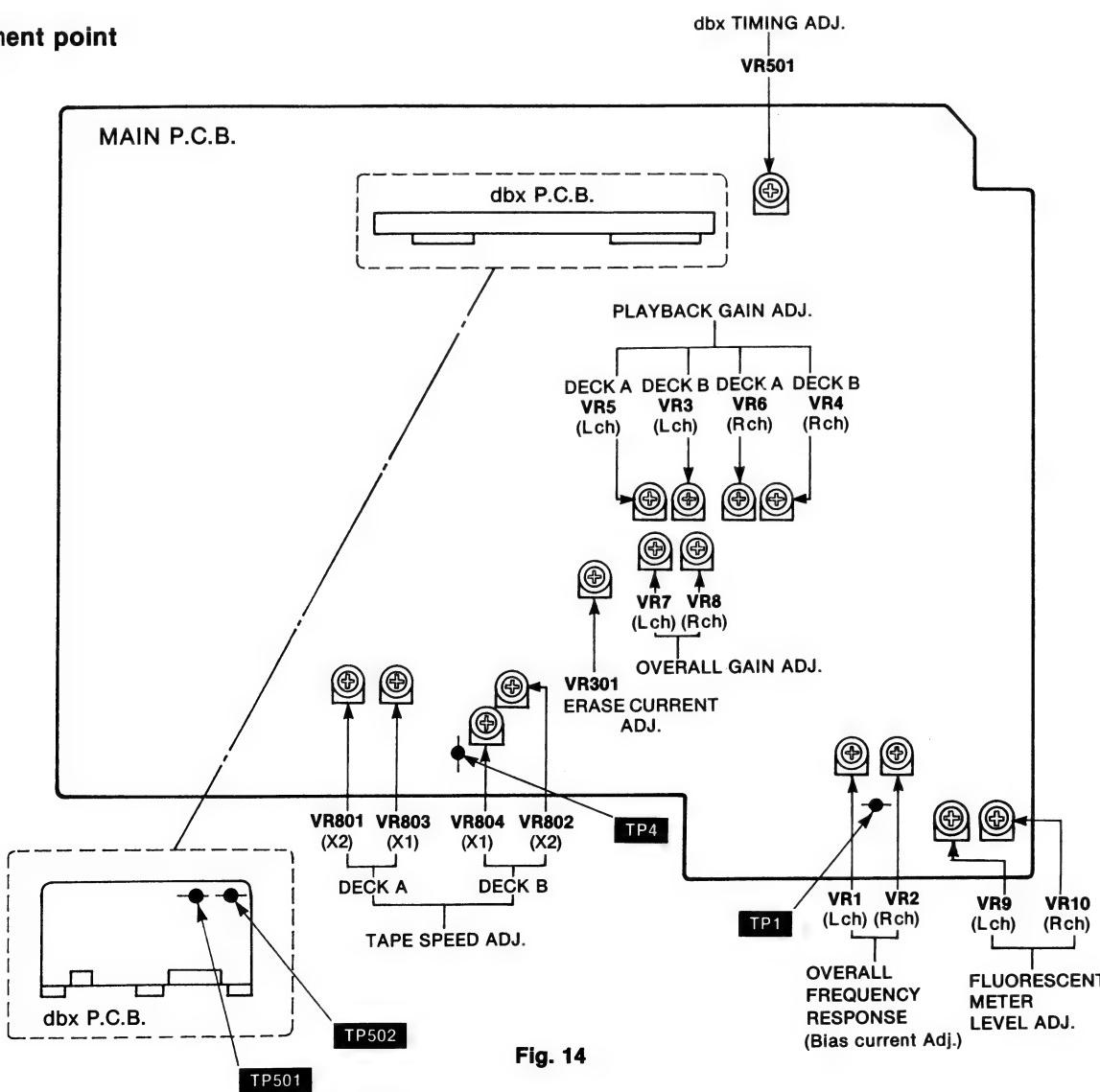


Fig. 14

■ MICROCOMPUTER TERMINAL FUNCTION AND WAVEFORM (IC901: LC6554H-3355)

Terminal	Symbol	Function/operation																																													
1	PN0	LINE OUT output mute control (OPEN in Line Out Mute mode)																																													
		<table border="1"> <tr> <td>DECK B</td><td>STOP, FF, REW PAUSE, MS SEARCH</td><td>PLAY</td></tr> <tr> <td>DECK A</td><td>ON OFF</td><td>ON OFF</td></tr> <tr> <td>STOP, FF, REW, PAUSE</td><td>OPEN OPEN</td><td>H H</td></tr> <tr> <td>PLAY</td><td>H H</td><td></td></tr> <tr> <td>REC PAUSE</td><td>OPEN</td><td>H H H</td></tr> <tr> <td>REC PLAY</td><td>OPEN</td><td>H H H</td></tr> </table>	DECK B	STOP, FF, REW PAUSE, MS SEARCH	PLAY	DECK A	ON OFF	ON OFF	STOP, FF, REW, PAUSE	OPEN OPEN	H H	PLAY	H H		REC PAUSE	OPEN	H H H	REC PLAY	OPEN	H H H																											
DECK B	STOP, FF, REW PAUSE, MS SEARCH	PLAY																																													
DECK A	ON OFF	ON OFF																																													
STOP, FF, REW, PAUSE	OPEN OPEN	H H																																													
PLAY	H H																																														
REC PAUSE	OPEN	H H H																																													
REC PLAY	OPEN	H H H																																													
2	PN1	Meter mute control <ul style="list-style-type: none"> When Auto Rec Mute switch (S713) is pressed in REC PAUSE mode, "L" → "OPEN", and "OPEN" → "L" when released. "OPEN" during Auto Rec Mute in REC PLAY mode. "OPEN" in STOP mode, and "L" in PLAY mode. 																																													
3	PN2	Rec amp mute control <ul style="list-style-type: none"> "L" when not in Auto Rec Mute mode. "OPEN" in other mode. (Timing Chart) <p>The timing chart shows the relationship between various control signals over time. It includes waveforms for REC PLAY (a pulse labeled 4 sec.), Play (a continuous high signal), PN2 (a pulse labeled 0.2 μsec.), ARM (a pulse labeled 0.2 μsec.), SOL (a pulse), Mechanism RM (a pulse), and CM (a continuous high signal).</p>																																													
4	PN3	Dolby IC Encode/decode selection. <ul style="list-style-type: none"> "H" in non-editing REC mode. "L" in other mode. 																																													
5	P00	Playback time constant selection <ul style="list-style-type: none"> "H" in normal tape play mode. "L" in CrO₂, metal tape play mode. Previous condition is maintained in other mode. 																																													
		<table border="1"> <tr> <th>DECK B</th><th>DECK A</th><th>DECK B STOP, FF REW, PAUSE</th><th>DECK B PLAY</th><th>DECK A PLAY</th><th>Edit mode DECK B PLAY</th><th>Edit mode DECK A PLAY</th><th>Edit mode DECK B REC, PLAY or REC, PAUSE</th><th>Edit mode DECK A REC, PLAY or REC, PAUSE</th></tr> <tr> <td>NORMAL</td><td>NORMAL</td><td>—</td><td>H</td><td>H</td><td>H</td><td>H</td><td>—</td><td>H</td></tr> <tr> <td>NORMAL</td><td>CrO₂ METAL</td><td>—</td><td>H</td><td>OPEN</td><td>H</td><td>OPEN</td><td>—</td><td>H</td></tr> <tr> <td>CrO₂ METAL</td><td>NORMAL</td><td>—</td><td>OPEN</td><td>H</td><td>OPEN</td><td>H</td><td>—</td><td>OPEN</td></tr> <tr> <td>CrO₂ METAL</td><td>CrO₂ METAL</td><td>—</td><td>OPEN</td><td>OPEN</td><td>OPEN</td><td>OPEN</td><td>—</td><td>OPEN</td></tr> </table>	DECK B	DECK A	DECK B STOP, FF REW, PAUSE	DECK B PLAY	DECK A PLAY	Edit mode DECK B PLAY	Edit mode DECK A PLAY	Edit mode DECK B REC, PLAY or REC, PAUSE	Edit mode DECK A REC, PLAY or REC, PAUSE	NORMAL	NORMAL	—	H	H	H	H	—	H	NORMAL	CrO ₂ METAL	—	H	OPEN	H	OPEN	—	H	CrO ₂ METAL	NORMAL	—	OPEN	H	OPEN	H	—	OPEN	CrO ₂ METAL	CrO ₂ METAL	—	OPEN	OPEN	OPEN	OPEN	—	OPEN
DECK B	DECK A	DECK B STOP, FF REW, PAUSE	DECK B PLAY	DECK A PLAY	Edit mode DECK B PLAY	Edit mode DECK A PLAY	Edit mode DECK B REC, PLAY or REC, PAUSE	Edit mode DECK A REC, PLAY or REC, PAUSE																																							
NORMAL	NORMAL	—	H	H	H	H	—	H																																							
NORMAL	CrO ₂ METAL	—	H	OPEN	H	OPEN	—	H																																							
CrO ₂ METAL	NORMAL	—	OPEN	H	OPEN	H	—	OPEN																																							
CrO ₂ METAL	CrO ₂ METAL	—	OPEN	OPEN	OPEN	OPEN	—	OPEN																																							
6	P01	Playback amp input selection <ul style="list-style-type: none"> "H" in DECK A playback mode. "L" in other mode. 																																													

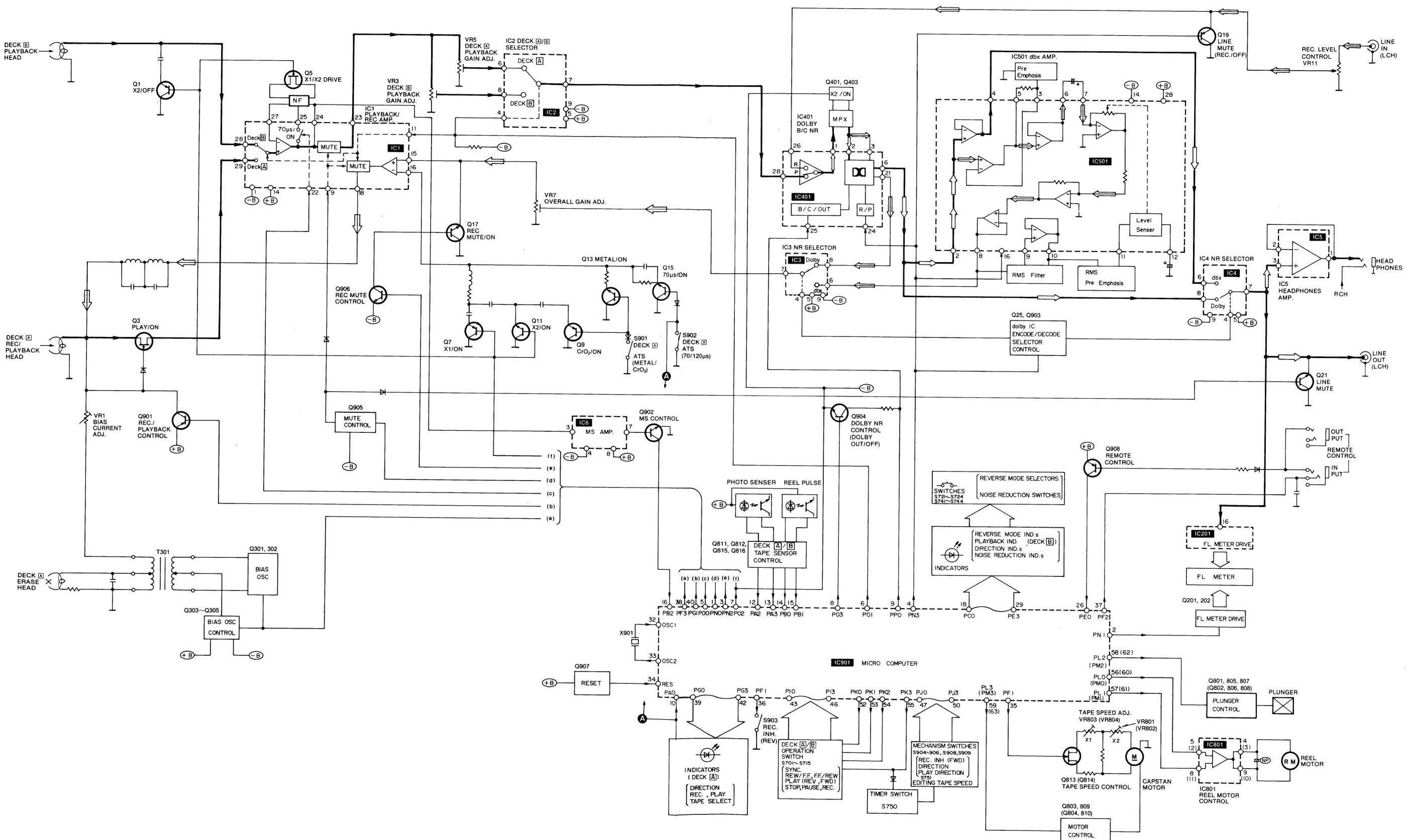
Terminal	Symbol	Function/operation
7	P02	X2 display output • "H" with X2 editing display LED ON.
8	P03	NR OFF selector • "H" in NR selector "OFF" mode.
9	PP0	Dolby C selector • "H" in Dolby C selector mode.
10	PA0	DECK A Auto tape selector input • "L" with normal tape loaded.
11	PA1	DECK B Auto tape selector input • "L" with normal tape loaded.
12	PA2	DECK B Leader tape detection • Usually "H".
13	PA3	DECK A Leader tape detection • "L" in leader tape play mode.
14	PB0	DECK B Reel base rotation detection Pulse is input when reel base rotates.
15	PB1	DECK A Reel base rotation detection Pulse is input when reel base rotates.
16	PB2	Music selector pulse input • "L" when music selector is operated with signal applied, and "H" without signal.
17	PB3	Power supply OFF detection • When power supply ON, pulse-form waveform as shown below is input. 
18	PC0	dbx display output • "L" with dbx display LED ON.
19	PC1	Dolby B display output • "L" with Dolby B display LED ON.
20	PC2	Dolby C display output • "L" with Dolby C display LED ON.
21	PC3	Editing display output • "L" with editing display LED ON.

Terminal	Symbol	Function/operation
22	PD0	↔ (SERIES) display output • "L" with ↔ (SERIES) display LED ON.
23	PD1	↔ (ONE WAY) display output • "L" with ↔ (ONE WAY) display LED ON.
24	PD2	↔ (REVERSE) display output • "L" with ↔ (REVERSE) display LED ON.
25	PD3	⟳ (REPEAT) display output • "L" with ⟳ (REPEAT) display LED ON.
26	PE0	Remote control serial signal input • Terminal to input KEY-IN signal from Amp, Receiver, Remote Control.
27	PE1	DECK B Playback display output • "L" in play mode • "H" → "L" → "H" repeated in music selector mode.
28	PE2	DECK B Direction display output • "H" with FORWARD LED ON. • "L" with REVERSE LED ON.
29	PE3	DECK B Remote control display output • "L" with power supply ON. • "H" with initial signal from remote control received. • "H" or "L" with DECK A or DECK B of remote control commander selected.
30	TEST	GND
31	V _{ss}	GND
32	OSC1	Clock oscillation terminal • Oscillation terminal, but microcomputer does not operate with probe connected.
33	OSC2	Clock oscillation terminal
34	RES	Reset terminal • Microcomputer reset usually "H"
35	PF0	Tape speed control • "L" during X2 tape travel.
36	PF1	DECK A REVERSE and REC INHIBIT INPUT • "L" when rec possible on reverse rotation side. • "H" when rec impossible. (Detected by tape erase preventing lug)
37	PF2	Direct operation inhibit output • "H" in REC PAUSE and REC PLAY mode.

Terminal	Symbol	Function/operation
38	PF3	DECK A Bias oscillation control • "L" in REC PLAY mode.
39	PG0	DECK A Direction display output • "H" with FORWARD LED ON. • "L" with REVERSE LED ON.
40	PG1	DECK A REC display output • "L" in REC PAUSE and REC PLAY mode.
41	PG2	DECK A Playback display output • "L" in PLAYBACK mode. • "H" → "L" → "H" → "L" repeated in PAUSE mode. • "H" → "L" → "H" → "L" quickly repeated in music selector mode.
42	PG3	DECK A Remote Control display output • "L" in Power ON mode. • "H" when DECK B is selected by DECK A/DECK B of remote control commander.
43	PI0	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK A FOR PLAY (S707), STOP (S709) and DECK B FOR PLAY (S708), STOP (S710).)
44	PI1	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK A REV PLAY (S705), DECK B REV PLAY (S706) and SYNCHRO START (S712).)
45	PI2	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK A FF (S703), PAUSE (S711), REC (S715) and DECK B FF (S704).)
46	PI3	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK A REW (S701), auto Rec Mute (S713) and DECK B REW (S702).)
47	PJ0	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK A FOR REC INHIBIT and X1/X2 SELECTOR SW (S731).)
48	PJ1	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK A PLAY SW (Head base plate position detection) and DECK B PLAY SW.)

Terminal	Symbol	Function/operation	
49	PJ2	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to DECK A/B DIRECTION SW (MECHANISM SW), EDITING (S732) and TIMER SW (PLAY).)	
50	PJ3	Input switch read • Each switch is read according to scanning of PK0~3. (Connected to TIMER SW (REC).)	
51	V _P	NO CONNECTION	
52	PK0	Input SW scan	
53	PK1		
54	PK2		
55	PK3		
56	PL0	DECK A Reel motor control (Forward direction) • "H" in FORWARD PLAY and FF mode.	
57	PL1	DECK A Reel motor control (Reverse direction) • "H" in REVERSE PLAY and REW mode.	
58	PL2	DECK A Plunger control • "H" for a short time when mechanism mode is shifted.	
59	PL3	DECK A Capstan motor control • "H" in PLAY and REC PLAY mode.	
60	PM0	DECK B Reel motor control (Forward direction) • "H" in FORWARD PLAY and FF mode.	
61	PM1	DECK B Reel motor control (Reverse direction) • "H" in REVERSE PLAY and REW mode.	
62	PM2	DECK B Plunger control • "H" for a short time when mechanism mode is shifted.	
63	PM3	DECK B Capstan motor control • "H" in PLAY mode.	
64	V _{DD}	Operates with +4.5V to +5.5V.	

■ BLOCK DIAGRAM



NOTES:

(→): Playback signal
 (↔): Recording signal

Parts Change Notice

Model No. RS-T55R [M, MC, E, EK, EG, EH, XA, XL, XB, PA, PE]

Please revise the original parts list in the Service Manual to conform to the change(s) shown below. If new part numbers are shown, be sure to use them when ordering parts.

Reason for Change		*The circled item indicates the reason. If no marking, see the Notes in the bottom column.					
1. Improve performance							
2. Change of material or dimension							
3. To meet approved specification							
4. Standardization							
5. Addition							
(6) Deletion							
7. Correction							
8. Other							
Interchangeability Code		**The circled item indicates the interchangeability. If no marking, see the Notes in the bottom column.					
Parts		Unit Production					
A Original		Early					
New		 Late					
Original		Original or new parts may be used in either early or late production units. Use original parts until the supply is exhausted, then stock new parts.					
B New		 Early					
Original		Original parts may be used in early production units only. New parts may be used in either or late production units. Use original parts where possible, then stock new parts.					
C New		 Late					
Original		New parts are to be used in both early and late production units. Stock new parts only.					
D New		 Early					
Original		Original parts must be used in early production units. New parts must be used in late production units only. Stock both original and new parts.					
(E) Other		 Deletion					
Part Number Information							
Model No.	Ref. No.	Original Part No.	New Part No.	Notes(*, **)	Part Name & Description	Q'ty	
CASSETTE DECK							
RS-T55R	134	SMQA1106	Deletion	6, E	TAPE B	0	

Please file this parts change notice with your copy of the Service Manual for model No. RS-T55R, Order No. HAD8705141CO.

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Matsushita Electric Trading Co., Ltd.
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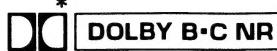
Panasonic Tokyo Office
Matsushita Electric Trading Co., Ltd.
6th Floor, World Trade Center Bldg.,
No. 4-1, Hamamatsu-cho 2-Chome, Minato-ku,
Tokyo 105, Japan

Service Manual

Cassette Deck

Supplement-II

**** dbx®/Dolby B-C NR, Auto-Reverse Double Cassette Deck**

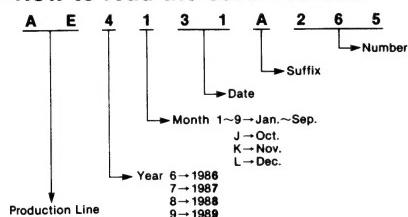


Please file and use this supplement manual together with the service manual for Model No. RS-T55R, Order No. HAD8705141C0.

Note:

- This supplement has been issued to inform you that the FL meter P.C.B. has been changed in units having serial number suffixes "C" or later.
- (Refer to "How to read the serial number" shown below).

• How to read the serial number



- The FL meter P.C.B. was changed to improve meter accuracy.
- The jumper on the back of the P.C.B. have been discontinued.
- The connector **H** has been changed from a 7-pin to an 8-pin connector.

RS-T55R

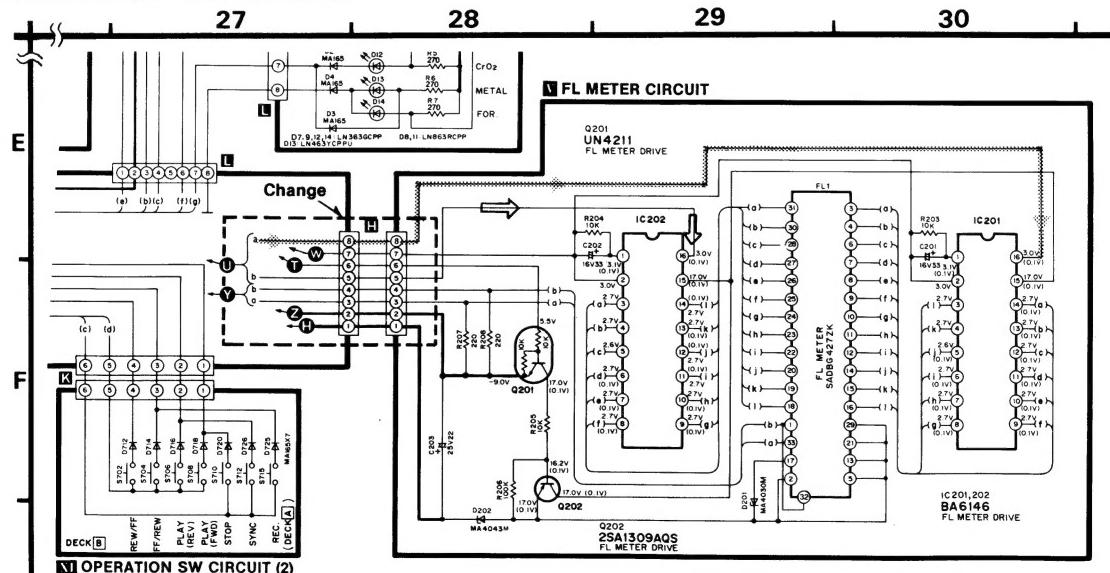
Color

(K)...Black Type
(S)...Silver Type

Color	Areas
(K)	[M]U.S.A.
(K) (S)	[MC]....Canada.
(K) (S)	[E]All European areas except United Kingdom.
(K) (S)	[EK].....United Kingdom.
(K) (S)	[EG]....F.R. Germany.
(K) (S)	[EH]....Holland.
(K) (S)	[XA].....Asia, Latin America, Middle Near East and Africa.
(K) (S)	[XL]Australia.
(K) (S)	[XB]....Saudi Arabia.
(K)	[PA]....Far East PX.
(K)	[PE]....European Military.

CHANGES

SCHEMATIC DIAGRAM



* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

** The term dbx is a registered trademark of dbx Inc.

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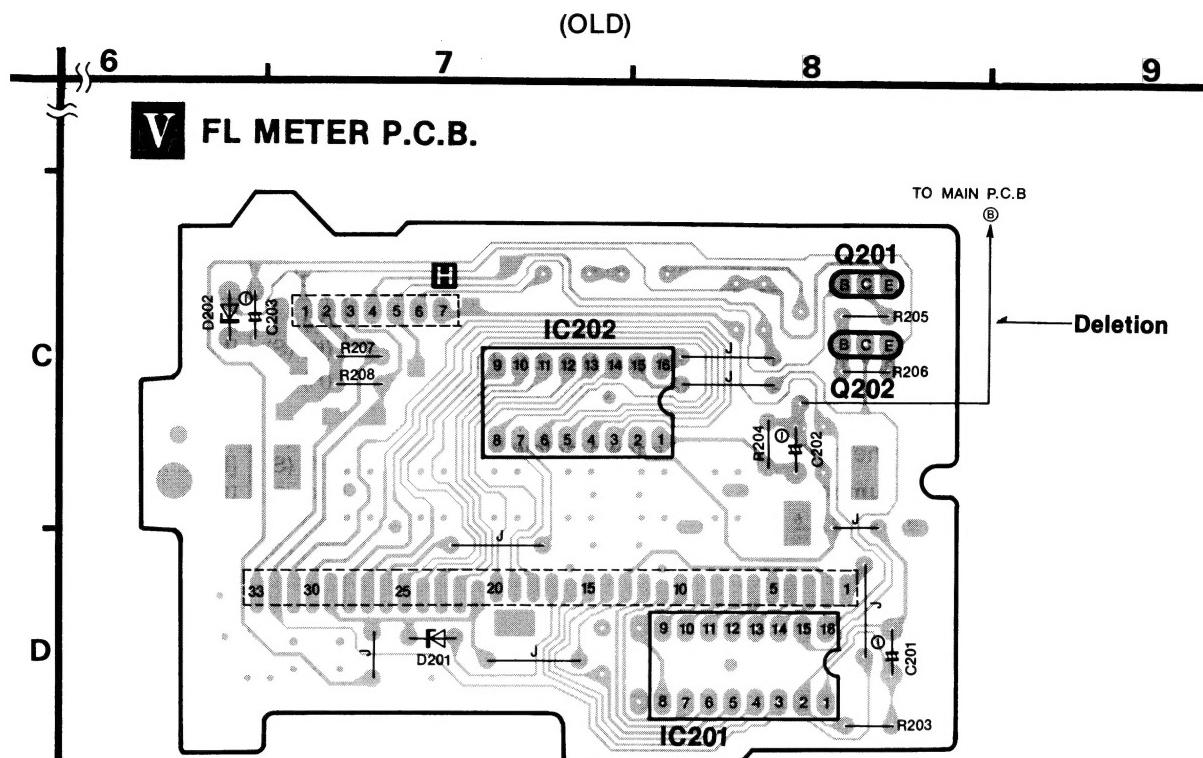
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Technics

■ PRINTED CIRCUIT BOARD

Note: • The jumper on the back of the P.C.B. have been discontinued.
The connector H has been changed from a 7-pin to an 8-pin connector.



(NEW)

